Operations Research in Health Systems Development

A Report of Nine Selected Innovative Approaches

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FRHS Foundation for Research in Health Systems

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About Foundation for Research in Health Systems

Foundation for Research in Health Systems is a registered non-profit society set up in 1989, operating from Ahmedabad. It undertakes scientific and social research that will lead to improvement in the management of health services. FRHS activities consist of sponsored research and technical assistance for designing systems for monitoring and evaluation and organsing training programmes and workshops on issues of health policy and management.

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Operations Research in RCH Programme

-Selected Case Studies-

Contents

Introduction..... 7

Case 1-Strengthening Antenatal Services
Dr. A.D. Pendse and Dr. Alka Barua..... 14

Case 2-Reproductive and Child Health Camps
Dr. Alka Barua and Dr. Dileep Mavalanakar..... 23

Case 3-Supportive Supervision A Management Tool For Service Improvement
Dr. Bella Patel, Dr. Leila Caleb and Dr. M.E. Khan..... 31

Case 4-Prevention and Management of Reproductive Tract Infections
Mr. Venkatesh Sreenivasan and Dr. Dinesh Agrawal..... 38

Case 5-Alternative Methods Of Health Care Delivery at Village Level
Dr. Prakasamma..... 46

Case 6-Women Centred Health Project
Dr. Usha Ubale and Ms. Renu Khanna..... 56

Case 7-Increasing Condom Use to Promote Reproductive Health
Dr. K. Pappu and Dr. S.K. Mishra..... 61

Case 8-Health Sector Reform and Development Programme
K. John Koshy and Ms. Akhila Vasan..... 69

Case 9-Quality Improvement Programme-West Bengal Reproductive and Child Health Project
K. John Koshy and Mr. Venkatesh Sreenivasan..... 80

Abbreviations

ADHO	Assistant District Health Officer
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
ANMTC	Auxiliary Nurse Midwife Training Centre
ANS	Academy for Nursing Studies
ASCI	Administrative Staff College of India
AWW	Anganwadi Worker
BDO	Block Development Officer
BEE	Block Extension Educator
BMC	Brihanmumbai Municipal Corporation
BMOH	Block Medical Officer of Health
BMS	Basic Minimum Services
CDPO	Child Development Project Officer
CHC	Community Health Centre
CHG	Community Health Guide
CHV	Community Health Visitor
CINI	Child In Need Institute
CMOH	Chief Medical Officer of Health
CNA	Community Needs Assessment
COPE	Client Oriented Provider Efficient Model
CSSM	Child Survival and Safe Motherhood
DA	Daily Allowance
DDK	Disposable Delivery Kit
DFID	Department for International Development
DHA	District Health Committee
DHO	District Health Officer
DM	District Magistrate
DWCRA	Development of Women and Children in Rural Areas
FRHS	Foundation for Research in Health Systems
GO	Governmental Organisation
HA(M)	Health Assistant (Male)
HIV	Human Immunodeficiency Virus
ICDS	Integrated Child Development Services
ICOMP	International Council on Management of Population Programmes
ICPD	International Conference on Population Development
IEC	Information, Education and Communication
IFA	Iron Folic Acid
IFPS	Innovations in Family Planning Services
IIHFW	Indian Institute of Health and Family Welfare
IIM	Indian Institute of Management
IPP	India Population Project

Abbreviations contd...

IUD	Intrauterine Device
LHV	Lady Health Visitor
MCP	Mother and Child Protection Camps
MIES	Management Information and Evaluation System
MIS	Management Information System
MPW	Multi Purpose Worker
NACO	National AIDS Control Organisation
NGO	Non Governmental Organisation
OHFWP	Orissa Health and Family Welfare Project
OPD	Out Patient Department
OR	Operations Research
ORS	Oral Rehydration Solution
OT	Operation Theatre
PDT	Project Development Team
PHC	Primary Health Centre
PHN	Public Health Nurse
PID	Pelvic Inflammatory Disease
PPC	Post Partum Centre
PSPU	Policy and Strategic Planning Unit
QI	Quality Improvement
QOC	Quality Of Care
RCH	Reproductive and Child Health
RTI	Reproductive Tract Infection
SAHAJ	Society for Health Alternatives
SDHM	Strengthening District Health Management
SIFPSA	State Innovations in Family Planning Services Project Agency
SRI	Social and Rural Research Institute
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
TA	Travel Allowance
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WBRCHP	West Bengal Reproductive and Child Health Project
WCHP	Women Centred Health Project
WHG	Women's Health Group
WHO	World Health Organisation

Introduction

Operations Research in RCH Program Selected Case Studies

Application of Operations Research findings in Public Sector Services

In recent years, many developing countries are using operations research (OR) to improve health and family planning services by finding solutions to resolve existing problems or to find innovative approaches to service delivery. Such research studies are typically carried out by researchers in small areas and in reasonably controlled environment outside the routine program. Therefore solutions eminating from such research do not find place in programmes or do not ge translated into policy for quite sometime.This is especially true in poorly managed programs where such research findings could actually produce the greatest impact.

Issues of replicability

There are several reasons why use of OR findings in the existing programmes is weak. Since OR findings usually come from special pilot projects that do not face the typical administrative, human and financial constraints experienced in public sector programmes. Public sector programme managers therefore are not ready to accept OR findings unless they are from similar settings as their own or from pilot projects whose conditions can be replicated in their settings. It usually takes a great deal of effort to be convinced about the positive impact of the specific change and the need to adopt to adopt that change in program performance. Also OR findings to be useful and applied, must address issues that program managers can directly manipulate.

Most Relevant when government is introducing a new program or re-engineering an existing program

Application of OR is relatively more easy and perhaps more relevant when government is introducing a new program or re-engineering an existing program as was the case when the Government of India (GOI) decided to convert its family welfare (FW) program into a RCH program. This new program was seeking to make reproductive health services available through the primary health care (PHC) system by filling the gaps in the existing program. These gaps for example were in the areas of emergency obstetrical care, management of reproductive tract infections, quality and access of services among the poor, services to new client groups such as adolescent men and women.

Changes in mindsets of service providers and clients needed rather than additional resources

Though the services included the RCH program did not require much additional resources they required changes in the mind-sets of service providers and of clients. Service providers needed to ensure that services were available, were of good quality, provided equitably and in a sensitive manner. Clients on their part needed to get over their sensitivity related to reproductive health problems and seek

appropriate care. A number of operations research projects were initiated in the country around the time of initiating the RCH program with the objective of finding innovative ways to improve its management and to make it client oriented. Most of these OR projects were implemented at district level within the government program, usually in collaboration with non-government organization, and were supported by various donor agencies such as International Development (USAID), Department for International Development (DFID), the Ford Foundation, and United Nations Population Fund (UNFPA) (see Box 1).

Box 1: The nine OR projects

Project Location	Implementing Organization	Donor Agency
Parner Block, Ahmednagar district, Maharashtra	Foundation for Research in Health Systems	Ford Foundation
Sanand Taluk, Ahmedabad district, Gujarat	Indian Institute of Management	Ford Foundation
Sitapur and Agra districts Uttar Pradesh	Population Council	USAID
Bundi district Rajasthan	UNFPA	UNFPA
Shamirpeth, Ranga Reddy district, Andhra Pradesh	Academy of Nursing Studies	ICOMP
Bombay Municipal Corporation Mumbai	Bombay Municipal Corporation	Ford Foundation
South 24 Paragana district, West Bengal	Child in Need Institute	DFID
Bhadrak and Ganjam districts, Orissa	Project Implementation Unit, Government of Orissa	DFID
Uttar and Dakshin Dinajpur, West Bengal	Project Implementation Unit, Government of West Bengal	DFID

Project Innovations

These projects attempted various innovations such as health systems reforms, client-centered approach to service delivery, restructuring service delivery system, use of supervision tool all aimed at improving delivery process, quality and coverage of RCH services.

This report presents nine such innovations that were implemented in the government system and had effectively addressed issues related to implementation of the RCH program. Each case describes the innovation, how it was identified, how it was implemented, inputs required, its cost effectiveness and impact.

An Overview

Innovations in the nine projects - An Overview

Though the aim of all nine innovations presented in this report was to improve the quality and quantity of health services provided to women and children, different innovations had tried to address different issues. One innovation had attempted to extend quality prenatal care to all villages thus increasing service coverage. In one case effort was made to provide the expanded package of RCH services using camp approach. Another case study describes how demand for condom could be increased by promoting it as a protection against diseases and not as a family planning method. One innovation dealt with the issue of how to make services provider both, women oriented and quality sensitive. Another attempted systems reforms such as decentralization to improve decision making and fund-flow at community level. Another innovation tried was a supervisory checklist to improve quality of supervision. And finally, one innovation showed how by appointing private nurse midwives a village can improve access to maternal care for women at an affordable cost. These nine case studies are briefly summarized below.

In addition to the experiences gained in these widely different projects and the lessons learned as described in each case study, there were a few common lessons or ingredients that seemed to have made these innovations effective. These were:

Mutually supportive roles of the government and NGO

Ingredients that made these innovations effective

In all the experiments the services were provided by government staff while the NGOs role was to monitor project activities, ensure smooth fund flow and facilitate corrective actions. In normal government functioning follow up of activities is poor; funds flow is not smooth i.e. funds are not available on time and supervisors usually do not corrective action. While NGOs have capacity to play these roles they have limited capacity to actually provide services on a long and sustained basis. In all the experiments presented in this report, government and NGO staff played mutually supportive role, which seemed to have contributed to their success. Therefore while

adopting these innovations in the larger system, it may be necessary to consider how the roles played by NGOs could also be replicated in the government system.

Use of data

In all experiments data was used to identify innovations, to monitor actions and to carry out mid-course corrections. That ensured rational thinking about what needs to be done and why. It introduced transparency in decision making and avoided ad-hoc decisions. It created opportunity for the staff to learn that increased their interest and involvement in the experiment. In the routine program data are used mainly for upward reporting of performance and not analyzed to identify problems or solutions.

Convergence

The third essential ingredients present in all experiments seemed to be the commitment of the government to experiment with the innovative solutions. The newly initiated RCH program served as an impetus for action, both for the state governments and NGOs. The project setting gave the staff opportunity to be innovative. Health staff also found their involvement in the project interesting because their work did not restrict to carrying out order from "above". That motivated many staff members to work and show improvement in the services. Since funds were routed through NGOs and not through the government's regular financial mechanism, they were available timely and where needed. As a result, the project implementers could ensure convergence of all inputs for the effective implementation of project activities.

The nine case studies are briefly summarised in the tables.

Summary of the nine Case

Case	Implementing Organisation	Site	Issue addressed	Innovation	Lessons Learnt
1.	Foundation for Research in Health Systems, Ahmedabad	Parner block, Ahmednagar district, Maharashtra	• Improving coverage of "full ANC" by efficiently using the existing resources.	• Convert the existing village level immunisation camps into Mother- Child Protection camps to provide a range of ANC/ PNC services	• RCH service coverage can be improved by carefully planning the work schedule of PHC staff, providing necessary equipment and training.
2.	Indian Institute of management, Ahmedabad	Sanand Taluka, Ahmedabad, Gujarat	• Meeting the unmet need for treatment of gynaecological morbidity and RTI	• Organise regular reproductive health camps at PHC level • Use specialist from private sector to provide services in the Camps	• Large camps (of more than 50 patients) can be effective as IEC tool but may impair service quality and follow-up. • The PHC staff can be provided hands on training by specialists at these camps. • External specialists can be expensive, and their involvement cannot be sustained in the government program. • RH camps cannot be effective without involvement of both men and women
3.	Population Council	Agra and Sitapur districts, Uttar Pradesh	• Improving program efficiency through supportive supervision	• Use of checklists to assess quality of work and adequacy of supplies, equipment • Use monthly review meetings to solve field problems	• Though checklists improves quality of supervision, supervision is not as effective unless its frequency can be improved through mobility support • Supervision remsins weak if supervisory cadre is weak and de- motivated.

Summary of the nine Case

Case	Implementing Organisation	Site	Issue addressed	Innovation	Lessons Learnt
4.	UNFPA, Rajasthan	3 PHCs in Bundi district, Rajasthan	• Increasing demand for RTI services and provision of these services	• Use syndromic approach for diagnosis and treatment of RTI by ANM	• ANMs can provide treatment for RTIs • GOI policy of not supplying drugs to ANMs is a constraint in implementing the approach
5.	The Academy of Nursing Studies, Hyderabad	Kolthur and Ponnal villages, Andhra Pradesh	• Increasing access to services of midwifery trained person in remote villages.	• Start village health centres operated by qualified, self-employed ANMs who charge beneficiaries according to a fee schedule decided by the village health committee.	• It is feasible to encourage self employed ANMs to set- up practice in rural areas in villages that are remote but not destitute. • Self employed ANM can be more effective than village health worker because beneficiaries want services of competent ANMs and are willing to pay for them
6.	Women- Centred Health Project, BMC	Two wards in Mumbai	• Making RH services women oriented, sensitive and respectful to women	• Use of observation checklist to monitor service provider's gender sensitivity, communication with client and technical competence.	• Service quality can be improved if the existing tasks are streamlined before adding new tasks • Supervision by professional colleague is more effective in producing change in attitude and behaviour than supervision by superiors

Summary of the nine Case

Case	Implementing Organisation	Site	Issue addressed	Innovation	Lessons Learnt
7.	Child in Need Institute, Calcutta	2 Blocks of 24 South Paraganas District, West Bengal	• Promoting condom use through effective social marketing	• Set up marketing channels to make condoms available in villages • Sensitise clients through peer educators to use condoms as protection against STD/ RTI/ HIV/AIDS and not for family planning	• Condom can be more acceptable as a means of preventing disease. • RTI can be a stigma because of its association with sex outside marriage • Reproductive health can be improved if misconceptions about RTI are removed • Peer educators can be utilised by the system to communicate with males
8.	Department for International Development (DFID)	Bhadrak and Ganjam districts, Orissa	• Improving districts' management capacity in order to reduce wastage and increase efficient utilisation of available resources.	• Authorise the PHC/CHC Medical Officer to carry out petty maintenance of buildings. • Provide fixed travel allowance for all health staff	• The reforms cannot succeed unless accompanied by changes in procedures and new guidelines. • The systems reforms cannot be implemented without building management's capacity to implement the reform
9.	Department for International Development (DFID)	Uttar Dinajpur and Dakshin Dinajpur districts, West Bengal	• Achieving sustainable improvements in quality and accessibility of RCH services by making government procedures simpler and quicker.	• Design of a flexible system of prgramme management and finance.	• The district / block management can be strengthened to handle fund management and accounting, • Making those new systems flexible and simple helps to improve quality of services

Case no. 1

Strengthening Antenatal Services

Parner Taluka, Ahmednagar district, Maharashtra

Dr. A. D. Pendse*
Dr. Alka Barua**

The Partners - FRHS, Govt. of Maharastra and Ford Foundation

Parner Block

House hold and facility survey to establish benchmarks

Background

Maharashtra is one of the better performing states in health and family welfare programmes. Its health infrastructure is well developed as per the norms stipulated by the Government of India. It has already achieved the "Health for All" goals in respect of Crude Death Rate and Infant Mortality Rate. Although its crude birth rate had shown decline, it was still high in 1994 when this project was initiated. The state government had commissioned a study to find out reasons for slow decline in birth rate. This study found the reasons to be low quality of health services, services not reaching remote villages and services dominated by family planning operations. The study recommended improving the service reach and quality, and emphasising mother and child-care services.

Keeping these recommendations in view, Foundation for Research in Health Systems (FRHS), in collaboration with the state government, initiated an Operations research (OR) project in Parner block of Ahmednagar district. Its objective was to try out innovative approaches for improving quality and quantity of health services. The project was of a four-year duration (August 1994 to July 1998) and was funded by the Ford Foundation.

Parner block has a population of 210,000, spread over 131 villages. The literacy rate is 46 per cent, which is below the state average of 63 percent and the sex ratio is 1,016 women per 1,000 men, which is slightly on the higher side compared to the state average (936 women per 1000 men) as a result of out-migration of men seeking employment in Mumbai. The government health facilities consist of one rural thirty-bed hospital, seven PHCs, and 38 subcentres.

How the Innovation was identified

In 1994, FRHS carried out a household and facility survey in Parner block to establish benchmarks for the research project. The household survey covered 1023 households while the facility survey covered all the seven PHCs and 38 subcentres in the block. Data from these surveys revealed the following (Box 1):

*: Joint Director, Directorate of Health Services, Maharashtra

**: Project co-ordinator, Foundation for Research in Health Systems, Ahmedabad

Box 1: Findings of Baseline Survey

- *Over 80 percent pregnant women had registered for antenatal care but only 50 per cent of them had received all components of ante-natal care (ANC)*
- *Antenatal care was relatively low among adolescent married girls and among primipara*
- *Women from well-off families and from villages where there were no government health centres went to private doctors for prenatal care.*
- *Only 14 per cent of the deliveries took place in government hospitals, 24 per cent in private hospitals and 62 per cent at home.*
- *About 81 per cent of children were fully immunised.*
- *Service coverage was much higher in villages where the PHC or sub-centres were located (85 per cent) than in other villages (69 per cent).*
- *A number of medical officers' posts were vacant. Essential equipment and supplies needed for antenatal care were in short supply.*

These findings were presented to the PHC staff who agreed that women preferred going to private doctors for any kind of treatment. They also viewed government health workers as family planning workers and felt that if female health workers (ANM) could provide better ANC services, their image in the community would improve. To improve ANC services, the researchers decided to adopt the strategy used in the immunisation program, which had achieved much higher coverage and better reach. The immunisation program strategy was to organise camps in each village with a population of 1000 or above, on a specified day, each month. In the OR project, FRHS decided to convert the immunisation camps into Mother and Child Protection (MCP) sessions as a way to take ANC services even to remote villages. The state government agreed to implement this innovation, namely, of providing ANC services at the village level through MCP sessions.

Organise mother and child protection camps in each village with a population of thousand or above on a specified day each month

Prior Situation

ANC Services once a week at the subcenters.

Male workers had no specific responsibility while women workers were overworked

Before the intervention, ANMs provided ANC services once a week at the sub-centres, where they gave them tetanus toxoid injection and iron folic tablets. Women who did not come to the sub-centre received tetanus injection and iron-folic tablets during the village level immunisation sessions. At any given session, there were about 25–30 children who came for immunisation, five to six pregnant women who came for tetanus injection and one or two women would come to receive contraceptive supplies. Only ANMs provided all services in these sessions while male workers had no specific responsibility. As a result, women workers were overworked, trying to serve 30-40 clients and sometimes as many as 100 in larger villages.

Sessions concentrated in four to five days in a month.

Most of these sessions were held in the second and third week of the month. Very few sessions were organised in the first and the fourth week as those weeks were reserved for meetings and preparing reports. Since all sessions were concentrated in four to five days in a month, health supervisors could not remain present during all the sessions to help the workers.

Quality of ANC services inadequate due to lack of equipment, supplies and training

Further, quality of ANC services was inadequate because most ANMs did not have the required equipment and supplies such as adult weighing scales, blood pressure equipment or reagents for urine testing. Some lacked practical skills in delivering ANC services. Some of the immunisation sessions in villages were held either in schools or in temple verandas. Most of these places did not have privacy or space for pregnant women to seek care.

After reviewing the "prior" situation, the researchers listed the changes needed in village immunisation sessions to make them effective vehicles for delivery of ANC services.

Description of the Intervention

Analysis of the "prior" situation helped to identify three areas that needed strengthening:

- *Making ANC services available in villages where PHC / subcentres were not located*
- *Improving technical quality and scope of services*
- *Improving availability of equipment and supplies*

To increase women's access to ANC services, the existing immunisation camps were converted into MCP camps that provided the full range of ANC services. MCP camps were rescheduled such that they were spread evenly over the month and both male (HA(M)) and female supervisors (LHVs) and male health workers could attend each camp and share duties with the ANM. The camps were mostly held in panchayat buildings, which were public places located centrally, where women could visit without hesitation.

The full range of ANC services proviced at the MCP Camps

Each ANM was provided with an ANC Kit that she would carry to villages to facilitate mandatory check-ups at these camps.

The ANC Kit

The kit consisted of a dari, a curtain, adult and child weighing scales, tape, blood pressure apparatus, stethoscope, foetoscope, uristix and ANC cards. Dari was for women to lie down for abdominal examination and curtains were to provide privacy.

Packed into a rexin bag (16 in. x 20 in.), the kit weighed about 4 kg.

The principal of the Regional Family Planning Training Centre, Pune, and the members of the District Trainer Team conducted a two-day practical training for all ANMs in the block on use of items included in the ANC kit. The training was repeated every six months, each time reviewing the intervention as well as taking new topics in which ANMs needed to build capacity. During the first three years of the project, five such training sessions were completed: three on quality of ANC services and two on diagnosing gynaecological problems using the syndromic approach.

Pratical training for all ANMs

The intervention was first implemented in 1995 in two PHCs: Parner and Bhalavani. A year later it was extended to two more PHCs: Rui Chhatrapati and Palve.

Implementation Experience

MCP camps were held each month on a specified day, in each village that had a population of at least 1,000. At this camp, pregnant women received a full range of services such as abdominal and breast examination, weight and blood pressure measurement, urine test, tetanus injection, iron-folic tablets, identification of high risk cases, and health education. As a result, village women did not have to go to sub-centres to receive those services. Timings were fixed from 10 a.m. to 4 p.m. at each village. Boards specifying the days, timings and the names of the health workers were prominently displayed in public places.

Female supervisor, a male worker and a male health supervisor remained present in each camp along with the ANM.

The new schedule ensured that a female supervisor, a male worker and a male health supervisor remained present in each camp along with the ANM. They worked out a system of sharing work at the camp. Under the new system LHVs and ANMs provided ANC and family planning services (IUD, oral pills and condoms). ANMs administered vaccines while LHVs did IUD insertions. Both provided health education while examining the women. The LHV rechecked all high-risk cases identified by the ANM. These women were asked to go to the sub-centre on a specific day to see the Medical Officer.

Work sharing and system streemlining

Male workers saw the children first. They weighed them, looked up their immunisation card and noted the due dose on a small piece of paper for the ANM. Mothers then took their children along with that piece of paper to the ANM who administered the dose. Then they returned to the male MPW who updated their immunisation card. This system streamlined the flow of work and prevented overcrowding and confusion in the camp. Male health supervisors provided health education and oversaw the arrangements to bring these children to the camp whose doses were due but they had not shown up.

PHC doctors were expected to remain present once a month, in four to five sub-centre clinics under their jurisdiction. For doing so one of the constraints doctors reported was non-availability of vehicles. Though each PHC did not have a vehicle allotted to it, at least one vehicle was available between two to three PHCs. PHC doctors shared vehicles in ways that enabled them to attend sub-centre sessions once per month. Each PHC had a vehicle allotted for 8-10 days per month. They scheduled sub-centre visits during those days. Though the project had provided funds if doctors wanted to hire vehicles to visit sub-centres, PHC doctors never used those funds.

Community participation

As the MCP camps became popular in the villages, community members came forward to help. Community Health Volunteers, balwadi teachers and even some community members helped ANMs with simple tasks like weighing, measuring height, and distributing tablets. Panchayat members publicised the camp days, and ensured that the place was kept clean and free from onlookers so that women could come without hesitation.

Operational support by FRHS

FRHS provided operational support to all MCP camps. FRHS field investigators made regular visits to each camp to see if equipment was functioning, whether those were being used and whether

medicines and other supplies were available. If any equipment was out of order, it was immediately repaired before the next camp. If uristixs were exhausted those were bought from the project fund without waiting for the government supply. In other words, the intervention ensured smooth and continuous availability of staff, equipment and supplies.

Outcome of the Intervention

FRHS field investigators, who made regular visits to each camp, also submitted a report to the project co-ordinator and the Assistant District Health Officer (ADHO) giving their observations on the functioning of the camps. These reports contained some quantitative information like number of sessions held, number of women who attended the camp and details of services in demand. It also contained qualitative information like holding of planned sessions, difficulties faced by workers, and problems at the camp including conflicts among workers or complaints by clients. FRHS investigators did not function as supervisors, but as a communication link between health workers and health officers. The ADHO, who was in charge of this project, held weekly meetings with the FRHS field staff to learn about the problems and to solve them.

Effectiveness of this intervention was assessed by comparing data on the caseload at the village camps and types of ANC services received, in the experimental and control PHCs as well as before and after the intervention (Box 2).

Box 2: Service coverage in `experimental' and `control' PHCs

ANC Services Received (%)	Experimental PHC		Control PHC	
	"Before" 1994	"After" 1998	"Before" 1994	"After" 1998
TT injection	72	85	72	73
IFA tablets	70	15*	70	10*
Abdominal examination	56	100	56	60
Urine tested	46	90	46	53
% Blood pressure taken	50	98	50	64

*: Shortage of IFA at the district level

The intervention was found to be very cost effective. The additional costs were those for the ANC kit. and training of workers. Other items such as medicines, vitamins, vaccines and family planning supplies came from the government's regular budget. These changes

ANC training - cost effective and contributed to quality

were not expensive. Over five years the cost of equipment for each subcentre was Rs 4800 and the cost of consumables (uristix, ANC cards and IFA tablets in case of shortage of government supply) was Rs 3000. These costs, along with training (Rs 1200 per female health worker over four years) were less than the monthly salary of the ANM. This additional input was found to improve ANC services significantly both in terms of quantity and quality.

Dramatic improvement in attendance of health supervisors and medical officers

FRHS field staff reported that MCP camps were rarely cancelled. Attendance of health supervisors at these camps improved from less than 5 per cent before the intervention to more than 80 per cent after the intervention. Medical Officers' presence at these camps had gone up from 0 to 30 per cent.

Other community level functionaries like balwadi teachers, Gram Panchayat members, Community health visitors (CHVs) welcomed the concept of an MCP camp. Each village prominently displayed days and timings of the camp to encourage health workers to maintain that schedule.

Improved attendance of pregnant women

The most visible improvement was in the attendance of pregnant women in the camp. Earlier where three to four pregnant women came for the immunisation session, this number increased to fifteen to twenty. While in the past, it was necessary to urge women to attend such camps, after the intervention they started coming on their own initiative because of the services they received.

Quality of services increased ANMs credibility

The quality of care also improved. More than 90 per cent pregnant women who came to the camp were physically examined, had their urine tested and blood pressure measured. Moreover, women started seeking services for other reproductive health needs such as medical termination of pregnancy, gynaecological problems and reproductive tract infections since they knew that ANMs could advise them on such problems during the camp. This was because the ANM or the LHV was spending about 10 minutes with each woman privately, conducting examinations and giving them advice. This facility was not available earlier.

Health workers did not complain about the extra work. Rather, they felt that the availability of supplies and equipment as well as the presence of Medical Officers at the camps improved their credibility. They were no longer called family planning workers.

Lessons Learnt

The experience of this intervention showed that in states like Maharashtra, it is possible to implement the essential reproductive health package through the government primary health care system at an affordable cost. It can be successfully implemented by streamlining the existing health services and strengthening supportive supervision. Some of the reasons for success were identified as:

- Ø Parner Block in Ahmednagar district, which was considered to be a difficult and low performing area, was never in the limelight and had never received any special project until this one. The health staff therefore was enthusiastic about the opportunity this project gave them to demonstrate their skills to the state level officers and to the external funding agency.

  Special project created staff enthusiasm

- Ø FRHS fully involved the district level officers in the intervention, right from the design to the implementation stage. Even field staff was consulted, especially in operational details. For example, field staff was consulted while deciding the schedule, content of the ANC kit, type of bag to be supplied - its weight and its size.

  Involvement of all stakeholders in process

- Ø Frequent interaction between field staff and district officers ensured prompt corrective actions in matters related to staff, equipment and supplies. The project was a live demonstration of "supportive supervision". The project ensured that health workers had the necessary equipment and supplies to deliver ANC services.

  Improved communications

Other important features of this intervention were:

- Timely availability of financial resources
- Absence of time lag between the designing of the intervention and its launch
- Consistency of the intervention with the priorities of the state
- Bottom-up approach to planning and implementation
- Absence of drastic modifications in the existing system
- Regular and need based training and reorientation of the staff

Timely and responsive financial flow was possible because FRHS operated the project funds and no money flowed into the government or Zilla Parishad system. Prompt and responsive financial system played a major role in improving the health service quality and quantity though no additional incentives were paid to the staff. Whenever the staff attended training or meetings, they were paid a daily allowance at government rates, but the amount was paid on the same day without

Timely availability of financial resources

any difficulty. This made workers happy.

Absence of drastic modifications in the existing system

Since the intervention did not drastically change the existing system, it was both sustainable and could be replicated in other blocks. The state government accepted the idea of converting immunisation sessions into MCP camps. It also agreed to provide an ANC kit along the lines tried in this project, and introduce social workers similar to FRHS's field workers who carried out supportive supervision, though the number of such workers would be fewer than in the project.

Bottom-up approach to planning and implementation lead to team work

However, the most important lesson of this innovation was the power of micro planning that ensured teamwork of health workers and supervisors at the MCP camps. The MCP camps would not have been as effective without such teamwork and without strict adherence to the camp schedule. In other words, equipment and supplies were important for improving ANC services, but the process of service delivery was even more important.

Background

Case no. 2

Reproductive and Child Health Camps

Sanand Taluka, Ahmedabad District, Gujarat

*Dr. Alka Barua**
*Dr. Dileep Mavalankar***

The importance of reproductive health services received global recognition after the International Conference on Population and Development (ICPD) held in Cairo in 1994. At that conference the Government of India, a signatory to the ICPD Plan of Action, committed itself to providing reproductive and child health (RCH) services through the existing family welfare programme. The challenge then was to translate this commitment into action. To translate that commitment needed three types of actions. One was to improve quality of existing services like immunisation and family planning. Another, to increase access to services such as delivery and medical termination of pregnancy that the existing program provided, but not to the desired extent. And the third was to add new services like treatment of RTI/STI and adolescent health. This case study describes an effort to introduce new services at the primary health centres (PHC) and to improve the quality of services provided by the PHC.

The Partners : IIMA and Government of Gujarat - health department

The Indian Institute of Management (IIM), Ahmedabad, initiated this project in collaboration with the state health department, in Sanand Taluka of Gujarat State in India.

Sanand Talkua

Sanand Taluka is located about 35 km from the city of Ahmedabad. It has a population of 1.6 lacs (1991) spread over 63 villages. It has a well-developed health infrastructure consisting of 30 sub-centres, four PHCs, one mobile health care unit and one 30-bed Community Health Centre (CHC).

How the Intervention was Identified

Meetings with the PHC staff and the community

In an effort to find out what could be done at the PHC level, the IIM project team held a series of meetings with the PHC staff and the community. During these meetings, health staff in the Taluka mentioned that in their experience, there was substantial unmet need for reproductive health services in the community, particularly for addressing their gynaecological problems. PHCs provided services to women who sought treatment from them. But many suffered silently, either because they did not know that their problems could be treated, or they were unaware that such treatment was available at the PHCs. Based on these discussions, the project team decided to launch a major effort to educate women about treatment for reproductive health problems and how they could obtain it.

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Camps as a strategy

In the past, the state of Gujarat had successfully used large sterilisation camps as a means to inform couples about family planning and to promote sterilisation method of family planning. These camps were usually held at PHCs, accompanied by a lot of publicity and fan-fair, where expert surgeons were brought from outside to carry out the operations. The project team decided to adopt the same concept to promote RCH services at the PHCs. This camp approach was expected to be an effective method for:

- Reaching a large number of clients
- Making specialists' services available to women
- Creating awareness about reproductive health needs and service availability.
- Involving the community in the RCH programme.

Description of the Intervention

Major RCH camps

The main feature of this intervention was regularly organising "major RCH camps" as a strategy to promote and provide RCH services. In these camps, services were provided by experts and specialists in reproductive health. The camps were expected to achieve two specific objectives: (a) make specialists' care available at PHCs, and (b) improve technical capacity of the PHC staff for providing RH services.

The Project Team

The project team consisted of a project co-ordinator, four field officers and two consultants, who were retired senior officers from the state Health Department. The field officers were responsible for one PHC each. Their job was to observe the functioning of the RCH camps, write reports and discuss them during the weekly meeting of the project team. The two consultants gave technical inputs on camp arrangements, quality of care and found ways to adapt the intervention to the government system.

Roles and responsibilities of the PHC staff and Consultants

To ensure smooth running of the camps, the project clearly defined the roles and responsibilities of the PHC staff, and provided additional inputs if necessary. Each RCH camp was attended by three gynaecologists, preferably female, one paediatrician, two Medical Officers, four nurses, one or two registration clerks, three ayahs, two compounders, two peons and four health workers.

Box 1: Services Provided in Major RCH camps

- *Paediatric examination and treatment for children*
- *Growth monitoring, immunisation and vitamin A supplementation*
- *Gynaecological examination for all women and their treatment*
- *Laboratory diagnosis for anaemia, Urinary Tract Infection*
- *Pap smear for early detection of cervical cancer and referral of cases, if any*
- *Examination of high risk pregnant women and their treatment*
- *Fertility advice and counselling*

Each camp received a large number of women and children for the variety of services offered therein (Box 1).

Resources for the camp

To accommodate them, each campsite had at least three to four spacious rooms and a waiting area for women.

Other facilities at the camp were:

- Twenty gynaecological examination sets (speculum, AV retractor, uterine sound, volsellum forceps, swab holding forceps)
- One hundred pairs of sterilised gloves
- Six bowls of Savlon and cotton
- One powerful torch or light
- Two sterilisers and hand washing arrangements
- Three clinical examination sets
- Three gynaecological examination tables
- Laboratory material (microscope, slides, testing solution)
- One unipolar electric cautery
- Adequate curtains for privacy.
- General furniture like table, chairs, and fans

Basic drugs available at the camp

At each camp, sixty basic drugs were made available in adequate quantities from the government source. In addition, the project provided additional drugs that were not supplied by the government, but were deemed necessary. These were Ciprofloxacin Capsules (500 mg x 1,000); Ointment Clotrimazole (four tubes); Tab Erythromycin (125 mg kid tab); Tab Amoxycillin (125 mg kid tab); Tab

Alabendazol (400 mg); Doxycyclin Capsules (100 mg x 1,000) and Gynocid Vaginal Tablets (100 packets).

Implementation Experience

The organisation of major RCH camps required elaborate preparation. The community had to be informed about the date, venue and purpose of the camps. Arrangements were needed to ensure availability of medicines, specialists and other needed inputs.

The preliminary mobilisation

The PHC staff, AWWs, talatis, teachers, members of women's groups, co-operatives and local NGOs personally informed members of the community about the camps. Handbills were printed and displayed on the Gram Panchayat notice boards.

During the ten days preceding the camp, female health workers went from house to house enrolling women who wanted to participate in the camp. At that time, they did preliminary symptomatic screening and advised some women to come to the camp where "big doctors would be examining and treating" such cases.

Symptomatic screening

The camps were held once a month on a fixed day in each of the four PHCs of Sanand Taluka. In the camp, five counters were set up. The first counter was to welcome women and to register their names and other personal details. At the second counter, doctors and ANMs took women's medical history and performed a general examination. Women were then told about per speculum examination. If any woman refused to undergo such an examination, she was treated based on the symptoms she reported.

Streamlining of camp functioning

At the third counter, health workers provided health education using flip charts and models, effectively using the waiting time between general and internal examination. At the fourth counter, the gynaecologist internally examined all married women and took Pap smears of all women above 35 years of age. Each woman received an explanation about her problem(s), as well as advice and prescription for medicines.

Women, who lived nearby, were asked to come to the PHC for the laboratory results and follow-up, and those who lived far away were visited at their homes by health workers. Those who required further investigation or treatment were referred either to the CHC or to the medical college hospital. Finally at the fifth counter, women collected the prescribed medicines from the pharmacist.

At the end of the camp, a meeting was organised in which the PHC staff, specialists and the project team reviewed the camp experience

and identified the corrections needed.

Outcome of the Intervention

Data regarding the number of camps planned, number of camps actually held, number of women who attended and the types of illnesses treated was collected and used to assess the innovation. An attempt was also made to assess treatment compliance, level of satisfaction and side effects.

Post-camp assessment of treatment compliance and level of satisfication

The project had planned to organise at least 50 camps in the Taluka in one year and systematise the process so that the camps would continue even after the project period. After holding 10 such camps, the experience was evaluated. The evaluation found that in those 10 camps a total of 1,407 women and 601 children were treated. The average attendance at each camp was 141 women (range 34–269) and 60 children (range 24–114).

However, some of the problems noted at these camps were over crowding and a long wait for those who came. As a result, about 10 percent of women and children were unable to get services. Quality of services also started deteriorating for the same reasons. Overcrowding affected health education, counselling and hands-on training of PHC staff. Though one of the objectives of the camp was to train the PHC staff in handling various reproductive health problems, the specialists simply did not have the time to see that this objective was achieved.

Effects of overcrowding and long wait for services

Service quality suffered because most cases were diagnosed based on quick clinical examination and not based laboratory tests. And since different specialists attended different camps, there was no uniformity in diagnosis and in prescribed treatments in different camps.

No lab tests lack of uniformity in diagnosis and treatment

The cost of organising such major camps was also found to be very high. The expenditure on each monthly camp was about Rs.10,500 (Rs 51.5 * average 200 cases) camp. Half of that amount was used to pay the honorarium for four specialists. The remaining amount paid for additional medicines, charges for three vehicles, snacks for the organising team, daily allowance for supporting staff consisting of four interns, laboratory technicians and nurses, and other miscellaneous expenses. Though the cost per case came to about Rs.51.5, the annual budget for the camps for a PHC came to over Rs.1.25 lac per year (Rs 10,500*12) which seemed much too high, raising questions about the feasibility and sustainability of the "Major

High cost of camps

RCH camp" concept in the government system.

Minicamps as new strategy

The project team then revised this strategy and decided to start "mini" camps that would provide quality service at a lower cost. Mini camps were organised at each PHC on fixed days, once every month. To avoid overcrowding, services were limited to about 40 women and 30 children, who came from different areas covered by the PHC. Only one external specialist, a gynaecologist, and one laboratory technician attended these camps. Medical Officers of the PHC handled paediatric cases. The PHC staff managed all other activities.

In one year, about 55 mini RCH camps were planned, of which 40 could be held. About 15 camps could not be held because women could not come during the harvest and rainy seasons. No camp was cancelled because of the non-availability of health staff. Each camp provided services, on an average, to 35 women and 25 children (Box 2).

Box 2: Details of RCH camps

Effectiveness Indicators	Major RCH Camps	Mini RCH Camps
Number of camps planned	50	55
Camps held	10	40
Number of women attended	1407	35
Number of children attended	601	25
Cost per case	Rs 51.5	Rs. 39.8

Lessons Learnt

Credibility and confidence of staff

The RCH camps were successful in creating awareness about reproductive health problems, more than any publicity campaign because the information about the camps and services went hand in hand. The camp approach not only increased the visibility of RCH services, but also the credibility of the staff. The staff members became confident of handling the cases becuase of the hands-on training from the specialists at these camps.

Possibility of cost reduction

The total annual cost for the mini camps came to about Rs. 28,000 (60 cases * Rs. 39.75/case * 12months), which seemed more manageable within the government system. However, the cost per case at Rs.39.75 was still not low. This cost could be further reduced if gynaecologists were posted at the CHC. The project team estimated the cost of implementing the innovation at Rs.12 lacs per

year per district.

The Mini RCH camps succeeded in treating 25–30 per cent of women suffering from RTI / STI in the PHC area. This estimate was derived by assuming that in a PHC area covering 30,000 population, about 30 per cent of married women suffering from gynaecological problems would be suffering from RTI. This level of treatment was a sizeable improvement over the earlier situation when no camps were being held. To these camps most of the women came on their own, without being prompted by health workers suggesting that there was a sizeable demand for RTI treatment, waiting to be tapped. RCH camps succeeded in tapping the existing demand. At the same time, they also succeeded in converting some of the "felt need" into demand through the IEC component.

Sizeable demand for RTI treatment

The project however, did not maintain systematic data on the effectiveness of treatment in terms of non-response to the treatment and relapse rates. Some health workers believed that these rates were high because they were not able to bring male partners to the camps despite their best efforts.

Need to maintain systematic data on effectiveness of treatments

The project helped identify the advantages of the Camp approach over the Routine Clinic approach:

- Health staff received practical training in the management of RTI and STD
- At the camps women received more in-depth counselling
- Camps provided access to services by specialists
- Health staff felt motivated because their credibility in the community increased
- Government health system became accountable to the community.

The project also demonstrated the rationale behind the selection of "mini" camps over "major" camps. "Major" camps were more effective in creating awareness and positive attitude in the community towards seeking treatment for reproductive health problems. But they were more expensive, required substantial efforts and provided lower quality services. Mini camps on the other hand, were low key in publicity, but were more economical and provided better quality services. PHC medical officers took more interest in organising mini camps because they could practice their clinical skills in these camps. This gave them recognition from the community and greater satisfaction. In "major" camps the limelight was usually on the outside experts, while PHC staff played only a secondary role.

Mini camps vs. major camps

Higher visibility for women's health in Primary Health Care

This innovation became successful in making women's health more visible in the primary health care. The camp approach helped improve teamwork and client counselling. The approach was found to be effective in giving a kick-start to the RCH program, and giving more visibility to the RTI services being provided at the PHC.

Limitations of the approach

However, it was also clear that this approach would not be very effective where the population is sparsely distributed, like in tribal or desert areas, where the caseload per camp is likely to be small. Also this approach will not help acute cases, as they cannot wait for the monthly camp.

Finally this intervention indicated that it could be sustained only if there is a stringent monitoring system and the presence of a motivated gynaecologist at the CHC or at PHCs is ensured. If the camps have to depend on external gynaecologists, the cost would be too high. Also, services of private gynaecologists cannot be guaranteed every time.

Background

Case no. 3

Supportive Supervision: A Management Tool for Service Improvement

Agra and Sitapur Districts, Uttar Pradesh

Dr. Bella Patel, Dr. Leila Caleb**,Dr.M.E. Khan****

The Partners: Health & Family Welfare department, IFPS & Population Council

Agra & Sitapur districts

In an effort to find alternatives to the target based approach to family planning, in March 1995, the Ministry of Health and Family Welfare, Government of India, exempted certain districts from family planning targets. In the state of Uttar Pradesh, the ministry chose Sitapur and Agra districts to participate in this effort.

During the fiscal years between 1995–98, the Department of Health and Family Welfare, and Innovations in Family Planning Services (IFPS) with technical assistance from the Population Council, carried out operations research (OR) to find viable strategies as an alternative to the target-based approach in these two districts.

The two districts differed from each other in respect of population, level of development and contraceptive prevalence rate. Sitapur district is among the most backward districts of Uttar Pradesh with a high Birth Rate (43.9 per 1,000 population), high Infant Mortality Rate (143 per 1,000 live births) and low Contraceptive Prevalence Rate (15 per cent). Agra, on the other hand, is a relatively developed district with better infrastructure. The corresponding rates are 35.5, 115 and 29, respectively. The variation in the two districts provided an opportunity to test the interventions in different environments, though under similar administrative control and limitations.

Five interventions were implemented in these two districts: Pregnancy Based Approach; Meeting the Unmet Need; Link Person Scheme; Introducing RTI services at the PHC level and Supportive Supervision. This case study describes the concept of Supportive Supervision, its implementation, evaluation and impact.

How the Intervention was identified

Discussions with State health officers and Chief Medical Officers

While implementing Pregnancy Based Approach at PHCs and sub-centres in the two project districts, several problems in service delivery had been identified. One of the problems was lack of a supportive supervision. Under the then existing target-based approach, the main goal of supervision was to achieve the targets set for specific services such as vaccination and family planning acceptance, specifically sterilisation and IUDs. Supervisors compared the number of doses distributed and contraceptive acceptors recruited against their respective targets. This approach to supervision allowed workers to neglect their responsibility for

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providing quality services. Supervisors paid little attention to the process of service delivery or provided little support to improve it. Supervision was identified as one of the weakest links in the system.

In May 1996, the concept of Supportive Supervision in the context of improving the service quality was first discussed with state health officers and the Chief Medical Officers of the OR districts. These discussions led to the decision to upgrade supervision skills at all levels within the districts (Box 1).

Box 1: The components of supportive supervision

- ***Supervisors making more frequent field visits to assist ANMs in fieldwork,***
- ***Assisting and training ANMs in maintaining records, preparing reports and planning services,***
- ***Monitoring ANMs' activities during home visits and at sub-centres clinics,***
- ***Improving supplies and equipment situation at sub-centres.***

Improve service quality through supportive supervision

Description of the Intervention

The first problem resolved in these districts was shortage of supervisory staff at all levels. This enabled the Chief Medical Officers of the district, to implement changes at several supervisory levels to help ANMs carry out their work. Supervisors had the flexibility to decide the content of supervision based on the ANM's requirements, which they reviewed periodically through field visits, records and reports. In order to change the mode of supervision from that of reviewing records to actually solving problems the first step was to explore the range of problems that could be solved. Supervisors at all levels had to understand problems at the village level and communicate those to the district level.

Move from reviewing records to identification and sloving of problems

The following activities were undertaken as a part of the intervention:

1. Health supervisors were trained on how to support and assist ANMs in improving quality of pre-postnatal care, family planning, immunisation and record keeping,
2. A fixed schedule of supervisory visits was developed to increase the frequency of their field visits,
3. District officers clarified the roles of health supervisors— male and female supervisors and PHC Medical Officers, and

4. ANMs' field visits were pre-planned and that plan was provided to the supervisor to avoid wastage of supervisory visits.

In order to standardise the process of Supportive Supervision, a training course and manual were developed by the Population Council, in consultation with the district health officers in the two districts. This manual contained four checklists (family planning, antenatal, postnatal and immunisation) adapted from the Target Free Manual published by the Ministry of Health, GOI. The manual also included practical exercises on how one could utilise data to identify clients' reproductive health needs and to improve service coverage.

Development of training course and manual.

In an effort to decentralise the supervision system, the original block PHC areas covering over 200,000 population, were sub-divided into several new PHCs, each covering a smaller area and about 30,000 population. The new PHCs were distributed among the block level medical officers, for closer supervision. Supervision training was organised in two parts, one for medical officers and the other for health supervisors.

Decentralised suupervision system

Implementation Experience

The intervention was implemented with the help of the staff of district Primary Health Care Services. The staff of the ANM Training Centre helped in preparing the training course, particularly the chapters on responsibilities of the female supervisors, family planning counselling skills, standards of care, and maintenance and requisition procedures. District female supervisors and Public Health Nurses Tutor along with the Chief Medical Officers and PHC staff looked after the arrangements for transportation, payment of travel allowances, preparation for training and distributing training material, and other logistics.

Staff responsible for implementation

SIFPSA, an organisation set-up to co-ordinate this project, provided financial inputs for the training programme. One of the key areas of training was field training for which SIFPSA helped arrange transportation and bore the IEC costs. The staff of the Population Council co-ordinated research activities and prepared interim and final reports for wider dissemination.

Responsibilities of training and research activities

Health supervisors' training was conducted in Agra during 4–6 February and in Sitapur during 25–27 February 1997. The training sessions included:

Training

Training on how to use the four different observation checklists for supervision of MCH and family welfare services

- Visits to two subcentres to demonstrate how to observe the service delivery process, determine service quality, and check for availability of supplies and equipment
- A practical exercise on how to evaluate quality of records in terms of their completeness and use that information for programme monitoring
- Preparation of supervision schedules and discussion on the concept of supportive supervision
- A practical demonstration on how to prepare Sub-centre Action Plan
- How to identify problem areas that need to be addressed, after studying workers' performance.

Following this three-day exposure to concepts, a three-week practical field training was organised under the guidance of the District Public Health Nurses and Medical Officers. Field training was followed by a 3-day debriefing session where field-training experiences were discussed and knowledge gaps were filled.

After six months, in August 1997, a one-day abbreviated training was organised in each district headquarters for district and block Medical Officers in the OR block to sensitise them to the concept of Supportive Supervision. They learned to use the supervisory checklists and the Eligible Couple Register.

Outcome of the Intervention

Different forums for addressing issues and problems

One of the intended outcomes of this intervention was to ensure that problems that could not be solved at the sub-centre level were not forgotten but brought to the notice of the next level supervisors for solution. The forums for adsdressing such issues were the monthly district level review meetings of Medical Officers, and the weekly meetings of health supervisors, held by PHC medical officers. The Population Council staff attended almost all these meetings and provided technical assistance in solving some of them.

During January–February 1998, Social and Rural Research Institute (SRI), a special unit of the Indian Market Research Bureau, conducted an evaluation of the Supportive Supervision intervention. The evaluation used qualitative research methods to assess the intervention from the perspective of different supervisors. The results however, have to be interpreted keeping in mind, that this evaluation was carried out barely one year after the intervention and that supportive supervision was one of five interventions implemented in the area.

The major evaluation findings were:

Evaluation results of the intervention

Ø District level officials showed increased understanding of the concept of supportive supervision

Ø Medical Officers and supervisors described their role as giving support to health workers. "Support" emerged as a key word when they described the intervention

Ø The supervisors in Agra district were more involved in the intervention compared to those in Sitapur. This was partly because Sitapur staff was kept busy with other training and interventions

Ø Medical Officers and female health supervisors welcomed the supportive approach, while most of the male supervisors resisted it. They preferred the differential status they had enjoyed earlier.

Ø The checklists had helped supervisors in understanding the concept of supportive supervision. Medical officers used them more comprehensively than health supervisors.

Quality improvement in supervisor visits

Ø There was no change in the number of field visits but there was a change in what the supervisors did during those visits. Earlier, they visited ANMs at the subcentres; now they visited the village with ANMs. This helped to increase the interaction between health supervisors and community members.

Ø Pre-planned tour programme of workers meant better use of the supervisor's visit and time. However, supervisors could not always adhere to their visit-schedule. They reported making 50-60 percent of the required visits. Difficulties with transport and other responsibilities were their reasons for the shortfall.

Ø The Intervention helped improve the monthly review meetings. The meetings became more systematic, interactive and led to some actions being taken.

Ø Records kept by ANMs were more complete. But since records and reports were many, supervisors felt that ANMs were reducing time for services and giving more time for record keeping,

Better stock maintainence

Ø Problems related to lack of supplies and equipment were promptly solved because those items could be bought from the project fund. Problems requiring government action were usually delayed.

Improvement in reproductive health service indicators

Ø In the initial four months of the intervention, there was a marked improvement in reproductive health service indicators. Achievements in immunisation and distribution of spacing methods improved as compared to the previous year. The availability of supplies and equipment also improved, though modestly.

Lessons Learnt

Improving supervision is one of several management interventions required to improve the overall management of the primary health care system in India. This intervention succeeded in focusing attention on this important component of the health system. It also showed that the capacity to train supervisors must be built into local institutions like the ANM Training Centres; and need not be sought from specialised institutions outside. Additionally, if district level supervisory staff like public health nurses, health supervisors and education officers are fully involved in this training, they continue to monitor health workers using principles of supportive supervision and hence become role models for the block level supervisors. Thus, capacity building of the existing system was a positive fallout of the intervention.

Capacity building of existing system

The intervention also identified several barriers to improving and sustaining supportive supervision and found ways to deal with them, which in turn resulted in maximum benefits from improved supervision. The barriers were:

Barriers to supportive supervision

Supervisor's Role: The most difficult obstacle to effective supervision was the confusion in the roles and responsibilities of supervisors. Some officers were still following the target-based approach. Many saw supervisors' role more as that of an assisting medical officer and less as supervising health workers.

Performance Standards: Performance standards for quality and quantity of the supervisor's work were not defined. In their absence, it was difficult to evaluate the supervisor's performance except subjectively.

Accountability: Medical Officers and supervisors were not required to submit a report of the supervision work they did. They only had to give verbal reports in monthly review meetings. They reported problems encountered but not about their solutions. Health supervisors rarely took an active role in monthly meetings.

Number of Health Supervisors: The existing supervisor to worker ratio was grossly below the recommended norm of one supervisor to six workers. In Agra, this ratio was 1:16; in Sitapur it was 1:10. To provide adequate supervision, there was a need to increase the number of supervisors.

Motivation: There was little incentive for health supervisors to improve their work standard. There was no recognisable connection between their performance and any rewards.

Mobility: The amounts of TA provided to health supervisors were insufficient to cover the actual cost of field visits. Problems of mobility and security were prevalent throughout the health system.

Because of these barriers, this intervention could not increase the extent of supervision though it improved its quality. The intervention succeeded in defining the supervisor's role, responsibilities, and performance standards. Supervisors were required to submit reports based on the use of checklists. This increased their accountability. Their mobility could be improved by giving fixed TA. Thus, even with limited supervisory staff, it was possible to improve supervision of the program if supervisors were given proper tools (checklists), roles and encouragement to excel in that role.

Case no. 4

Prevention and Management of Reproductive Tract Infections

Bundi district, Rajasthan

Venkatesh Srinivasan*, Dinesh Agrawal**

The Partners: Govrnment of Rajasthan and UNFPA

Bundi district

Background

This case study describes an innovative field experiment in which the technical staff of the PHC trained in prevention and management of Reproductive Tract Infections (RTIs) used specially developed, simple, low cost and valid flow charts. These modified syndromic management flow charts were used in case of symptomatic women identified during home visits or at the sub-centres. Before the field usage the experiment also involved testing the validity and reliability of these charts against the "gold standard" of specialist.

Government of Rajasthan with the support of UNFPA initiatde this programme in Bundi district of Rajasthan.

The experiment was carried out in Bundi district in Rajasthan. Bundi district has a population of 7.7 lakhs as per the 1991 census. Twenty-seven PHCs (each serving a population of 30,000) and 141 subcentres are located in the district.

How the Innovation was Identified

A baseline survey and discussions with MOs to identify reasons for high dropout rate among IUD users.

In March 1995, a baseline survey was carried out in Bundi district to help formulate a health plan for the district. One of the findings of this survey was the high dropout rate among Intra-uterine device (IUD) users, up to 50 per cent within six months of use and 70 per cent within 12 months. In 1996 all Medical Officers (MOs) from the district participated in a workshop where they discussed the survey results and steps to formulate a district health plan. Specifically in response to the finding on IUD dropout rates, the doctors mentioned that though they were not sure that the high dropout rate was because of prevalence of RTIs among IUD users, a large number of women in rural areas suffered from RTIs. They had heard from workers that IUD acceptors usually complained about increased backache and bleeding after two to three months of use and wanted IUDs to be removed.

Provision of RTI services in three PHCs on a pilot basis.

Based on this information, the state government with the support of UNFPA, initiated a programme to provide RTI services in three PHCs, Alod, Dalbana and Gothra, on a pilot basis. This was one of several activities undertaken in this district to improve availability of Reproductive and Child Health services. Other activities included improving programme monitoring by restructuring the content of

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the monthly meetings; initiating community based contraceptive distribution, and strengthening IEC activities in the district.

Description of the Intervention

In the government system, Medical Officers use flow charts to diagnose RTI among symptomatic women who came to the PHC to seek treatment. The number of women seeking treatment for RTIs at the PHC level could not be estimated due to lack of data, but it is known that the numbers are low (estimated to be less than 20 per year). It is known that women, especially rural women, do not readily seek treatment for RTI complaints because they feel shy or do not know that these complaints can be medically treated. Therefore simply providing diagnostic and treatment facility at the PHCs would not have ensured higher utilisation of RTI services. An innovative approach was needed to increase demand for RTI services among rural women.

Need for innovative approach to increase demand for RTI services among rural women.

This innovation was to hold regular RTI treatment camps at the PHCs to which symptomatic women would be invited to receive specialist's services. Identification of symptomatic women would be done by the health workers and doctors (a) using syndromic approach during their household visits, and (b) screening all women who come for family planning and ante-natal care services at the PHC or subcentre. Those diagnosed with RTI would be first treated on site and then asked to attend the PHC camp for higher level of care.

Regular RTI treatment camps with specialist services at the PHCs

The primary objective of this innovation was to reduce prevalence of RTI among rural women and the secondary objective was to increase IUD retention rates by giving women the confidence that side effects of IUD, if any, can be treated medically.

Innovation was Identified

While implementing the innovation, the first step was to train all the technical staff of the PHC -- female and male health workers, supervisors, medical officers, and laboratory technicians, in prevention and management of RTI. A three-day training was organised for this purpose in which the topics covered were:

Training in prevention and management of RTI.

- Causes, transmission and prevention of RTIs
- Syndromic approach for diagnosis and treatment of RTIs
- Basic laboratory test and procedures in case of suspected RTIs
- Role of education and counselling in the prevention and

management of RTIs

Finalisation of RTI syndromic management flow charts

The second step was to finalise RTI syndromic management flow charts based on those developed by the World Health Organisation (WHO) and NACO. These charts were used by health workers to identify symptomatic women, during home visits and at the subcentres. Before finalising these charts, their validity and reliability was studied when used by health workers and medical officers against the "gold standard" of specialist.

Special three-phase study of symptomatic women

For this a special three-phase study was conducted during May 1996 in all three PHCs. This study measured the sensitivity, specificity and predictive value of flow charts to diagnose vaginal discharge among symptomatic women. In phase one, IEC activities were conducted in the villages to inform the community about the availability of RTI treatment services on scheduled dates at respective PHCs. In the second phase, two one-day camps were organised at the PHCs. With the help of flow charts, the health workers arrived at a particular treatment option based on risk assessment.

The diagnoses made by health workers and the medical officers using the flow chart were compared with those of the gynaecologists' in the third phase. A female gynaecologist, who had fairly extensive experience in the field, examined the identified women and on the basis of her clinical experience, arrived at a final diagnosis and treatment.

Male medical officers did not use speculum, as women were not willing to undergo internal examination by male doctors. However, they were allowed to remain present when the female gynaecologist carried out speculum examinations, and observe the origin and nature of the discharge for making the diagnosis.

Table in following Box 1 presents the distribution of diseases that were diagnosed using the flow charts during the camp days.

Box 1: Number of cases diagnosed by type of disease

	Disease	No. of Cases Diagnosed
1.	Syphilis	2
2.	Gonorrhea	10
3.	Trichomoniasis	30
4.	Candidiasis	27
5.	Bacterial Vaginosis	46
6.	Trichomoniasis and Candidiasis	14
	Total	129*

* Some women were suffering from more than one disease.

The assessment showed that specialised training did not make a difference to the validity of the diagnosis. The accuracy rates for both health workers and Medical Officers were similar.

The study also showed that using these flow charts, both health workers and medical officers arrived at a similar diagnosis most of the time.

The sensitivity and predictive values of the flow charts were significantly high (Box 2)

Box 2: Sensitivity and predictive values of the flow charts

	Female Health Worker	Medical Officers
Sensitivity (i.e. probability of positive diagnosis in women with disease)	85.4	89.3
Specificity (i.e. probability of negative diagnosis in women without disease)	80.0	80.0
Positive predictive value (i.e. probability of a woman being diagnosed as having the disease when she has disease as diagnosed by gynaecologist)	95.6	93.0
Negative predictive value (i.e. probability of a woman being diagnosed as not having disease when she has disease as diagnosed by gynaecologist)	51.6	60.0

Limitations

Though this innovation in which workers used Syndromic approach to screen suspected cases of RTI/STI during household visits and clinical contact with women, had several benefits, it also had certain practical limitations. The first limitation was that it made women dependent on ANMs' home visits. Women appreciated the benefit of getting treatment in the privacy of their homes though it also meant that women in remote villages and poor women, who were not home when ANMs visited them, could not get that service. In other words, the innovation created an equity problem.

Its second limitation resulted from women's resistance to speculum examination. Protocol required that after health workers make a provisional diagnosis, women would undergo clinical and laboratory examination for deciding the treatment. However, in most cases treatment was decided based only on reported symptoms without the use of laboratory tests or physical examination. The reported

figures of "over 80 percent cure rate and 15 per cent relapse rates" therefore appeared to be wrongly estimated. The evaluation of the project had noted 30 per cent relapse rate and also noted the practice of registering "no relief" cases as new cases, which would have inflated the cure rate and also the case load. Evidence also suggested that the reappearance of symptoms was not because of invasive contraception or obstetric procedures but most likely because of poor partner management (inadequate health care to the spouse) by health workers.

The third limitation was ANMs' inability to talk with men to secure their compliance in treatment seeking. The ANM offered services only to women. The IEC efforts were also focused on women (while men were largely left out), as service and information seekers. As a result, some changes were needed in the intervention such as:

- Discontinuing the practice of registering "recurrent" and "no relief" cases as new cases because it over-estimated the cure rate and under-estimated the relapse rate.
- Involve male workers, specially to increase effectiveness of partner management.
- IEC to focus on encouraging women to come forward for services rather than wait for ANMs to come home.
- IEC to promote per speculum examinations, laboratory tests and referral services for improving quality of care.

Outcome of the Intervention

UNFPA evaluation of intervention

After fully testing the Syndromic flow charts, female health workers began to use them during home visits and with women who came for family planning and prenatal services to the subcentres. They identified women with symptoms, gave them treatment and asked them to come to the PHC camp on a specific day for further treatment. Most women complied with this advice. One year after the intervention, UNFPA carried out an evaluation of this intervention in terms of number of cases treated, efficacy of the treatment, morbidity patterns among cases treated and quality of intervention management.

This evaluation noted several positive outcomes such as:

- Between March 1996 and September 1997, 837 RTI patients were treated at the experimental PHCs. This number was significantly higher than the baseline.

- Out of the cases treated, 80 per cent were reported to have "recovered", after going through the treatment.
- Most cases came from the villages where PHCs and subcentres were located. They did not come from other villages.
- The intervention succeeded in creating awareness about RTI services. Women seemed less hesitant about seeking treatment
- Sixty-six per cent of the cases sought treatment on their own while 33 percent of the cases were referred by workers.
- IUD dropout rate decreased from 70 per cent to 53 per cent and IUD retention for 12 months or more, increased from 30 per cent to 47 per cent.

Lessons learnt

Feasibillty of providing RTI treatemtn at the PHC level in rural areas

To improve reproductive care in the country it is necessary to develop PHC's capacity to provide treatment for RTIs / Sexually transmitted infections (STIs), especially in the rural areas. This can be achieved if health workers can be trained in diagnosis, and are empowered to provide basic treatment. This experiment demonstrated the feasibility of such an innovation under certain conditions.

Availability of female doctors at PHCs

In this experiment, health workers had informed the community that RTI treatment would be provided at the PHC through female gynaecologists on the camp days. This information helped change the latent demand of women for treatment into actual demand. Many women, who suffered from these problems but did not want to see a male doctor, were persuaded to come forward for treatment. This was the easiest group to tap.

Availability of simple, low cost tool for RTI management

The simple, low cost and valid Syndromic flow chart was another important aspect of this innovation. This tool gave the strategic advantage through which the resource-scarce primary health care system could deliver RTI services. Health staff could screen cases in the field and refer only those who needed treatment.

Empowerment of health workers

Health workers, in addition to undertaking diagnosis, were able to give basic medicines. That bit of empowerment increased their involvement in the intervention.

IEC by health workers to create demand

Health workers carried out IEC in this innovation in conjunction with service delivery. They identified symptomatic cases among women who came for other services, thus avoiding the stigma and shame associated with these conditions. Women who suffered from any problem were fully informed about where and when they could go for treatment This IEC seemed to be effective in converting a lot of latent demand into actual demand.

Low cost of basic treatment

During one year of the experimental period, the caseload had increased twenty-fold. Could such an increase be managed within the resources available in the PHC system? An exercise carried out using estimates of morbidity rates of spectrum of RTIs/STIs and the cost of treatment showed that a health centre covering 100,000 population, would need about Rs.13,000 to treat all RTI cases that would come to the PHC camp through this approach. These calculations were made based on the following assumptions:

1. Estimated number of eligible couples (15–45 years) =17,000.
2. Number of women likely to report RTI symptoms [30 per cent of (1)] = 5,100.
3. Number of women likely to seek treatment at PHC [25 per cent of (2)] = 1,275.
4. Number of partners to be covered [(50% of (3)] = 640.
5 Total Expected cases to be treated at PHC = 1,915 (approximately 2,000).

Box 3: Cost of managing estimated 2,000 cases

Distribution of Morbidity	Estimated Cases (%)	No. of Cases	Unit Cost (Rs.)	Total Cost (Rs.)	Drugs & Regimen
Syphilis	2	40	9	360	Benzathin Pencilline
Gonorrhoea	7	140	21	2,940	Norfloxin 800 mg (1 tab)
Trichomoniasis	25	500	4	2,000	Metronidazole 400 mg (5 tabs) Clotrimazole 500 mg (Intravaginal tab)
Candidiasis	25	500	7	3,500	Clotrimazole 500 mg (Intravaginal tab)
Bact. Vaginosis	30	600	4	2,400	Metronidazole 400 mg (5 tabs)
Trichomoniasis & Candidiasis	11	220	11	2,420	Metronidazole 400 mg (5 tabs) Clotrimazole 500 mg (Intravaginal tab)
Total	100	2,000	56	13,620	

Initiation and sustainability of RTI services in the public health care system are dependent on availability of funds and designing a system that is sensitive to women and addresses their concerns. Judicious use of available funds for providing RTI services could bring about improved quality and increased coverage of RCH services resulting in increased retention of IUDs.

Case no. 5

Alternative Methods of Health Care Delivery at the Village Level

Ranga Reddy district, Andhra Pradesh

Dr. Prakasamma*

The Partners: ANS and ICOMP

Ponnal & Kolthur, Ranga Reddy district

Community managed health centers

Background

This case study describes an innovative field experiment in which two types of health workers were appointed to assess their effectiveness on providing access and quality of services in rural areas. This experiment was set up in two villages where government health centres were not located.

The Academy for Nursing Studies (ANS), Hyderabad with financial assistance for the research component from the International Committee on Management of Population (ICOMP), Kuala Lumpur carried out this experiment. Expenditures on services were met either by the community or by the clients.

The case study compares quality and quantity of services provided in two village health centres, both started in March 1997 in Ponnal and Kolthur villages under Shamirpet PHC of Ranga Reddy district in Andhra Pradesh. The two villages were similar in many respects. Both the villages were located at some distance from the PHC and subcentre. Kolthur was located 9 km from the subcentre and 15 km from the PHC. Ponnal was located 7 km from its subcentre and 10 km from the PHC. Both the villages were away from the main road. Though bus facility was available, buses were irregular and infrequent. The situation was worse during the rainy season. A bad stretch of road made them inaccessible during the rains. As a result, ANMs from government centres visited those villages usually once a fortnight. Both villages had strong and functional Women's Health Groups. These groups had their own bank accounts and were registered societies. Both villages were located away from subcentres. Government ANMs visited these villages once a fortnight or less. Other common features of the two villages were:

- Communities had decided to start the centres
- WHGs were responsible for monitoring both the centres
- Health workers stayed in the village and provided round-the-clock services
- Village health workers collaborated with the government health workers
- Academy of Nursing Studies ensured referral linkages and supervised at both the centres

*: Honorary Secretary, Academy for Nursing Studies (ANS)

How the innovation was identified

In 1995, ICOMP had initiated a series of projects in three Asian countries (India, Vietnam and Sri Lanka) to improve the quality of care in health and family welfare programmes. In India, the Administrative Staff College of India (ASCI) implemented the project in Shamirpet PHC, during 1995-97.

Health scenario in project area

This project had shown that the benefits of ANMs' services were available to those villages where sub-centres were located. Villages located far away from these centres did not receive even the basic health services. Some of these villages were large enough to require health centres of their own. In most villages, demand for services had increased due to the intensive community mobilisation activities carried out during the quality of care project. WHGs in these villages were willing to participate in health care activities and wanted to establish regular health services in their villages.

Government of Andhra Pradehs's Universal Health Service Programme.

In the meantime, the Government of Andhra Pradesh was also considering the possibility of expanding health services to remote villages to increase their access to services. The government had started a massive programme for building awareness regarding government health facilities. Moreover, the Vision 2020 of the state government had envisaged a universal health services programme. In accordance with that vision the government planned to introduce *Arogya Sevikas* who would be trained for a short duration (3 months) and posted in their villages. They would operate village health centres with support from ANMs. The government had already started training *Arogya Sevikas* in some districts.

Arogya sevikas and a self employed ANM

ANS decided to try out an alternative, which was to be a self-employed ANM willing to operate village health centres. Andhra Pradesh has surplus trained ANMs who have not been absorbed in government service. The field experiments planned in Kolthur and Ponnal involved starting two village health centres, one looked after by an Arogya Sevika and one by a self-employed ANM. This experiment was to provide inputs for the state government's policy of appointing Arogya Sevikas and assess the effectiveness of the proposed alternative.

Description of the Intervention

In this experiment, two service-delivery options were tried in two large but remote villages where access to government health centres was low. One option was a married woman from the village and

another was a self-employed ANM (Box 1).

Box 1: Service delivery options

Option I: Arogya Sevika (Village health worker)

This option involved selecting, training and guiding an educated married woman of the village, to provide basic health care round the clock from a village health centre.

Option II: Self-employed ANM

This option involved appointing, training and supporting a qualified ANM not employed in the government system, to set up and manage a village health centre.

Two villages—Ponnal and Kolthur, in Shamirpet PHC were selected for this experiment. The similarity between the two villages was deliberate, so as to facilitate comparison of results at the end of the experiment.

Active WHGs

Both villages had poor access to health facilities. But the village environment in both the villages was supportive to the experiment. The panchayat members showed interest and willingness to contribute in cash and kind to the health centres. Both sarpanchs were women from backward communities. The WHGs of both villages were active and willing to support health centres in their villages. In one village, Ponnal, the Women's Health Group (WHG) nominated a young married woman from the village to run the village health centre. In another village, Kolthur, the health centre was run by a qualified ANM as a self-employed health practitioner. The WHGs held regular meetings and demonstrated team spirit and cohesiveness among themselves.

However the two villages were slightly different on three counts—their size, spread and people's willingness to support an ANM (Box 2)

Box 2: Details about the two villages

	Ponnal	Kolthur
Population	2,101	3,210
Households	400	600
Outreach	No hamletsattached to the village	Village was spread out with two hamlets.
Willingness	Villagers doubted their ability to support a qualified ANM	Villagers wanted a fully qualified ANM and were willing to take responsibility for her payment and accommodation.

Roles of WHGs, ANS and health facilities

Both the centres functioned under the administrative control of the village WHG. The Academy for Nursing Studies undertook technical monitoring, PHC and other nearby hospitals provided referral support. The WHG decided the amount and mode of payment to the health worker.

Implementation Experience

The implementation process consisted of five steps.

Identification of health workers

For selecting *Arogya Sevika*, the ground rules were that she should be educated at least up to tenth standard, must be young and married. She should have a small family and minimum financial constraints so that she could devote time for health activities. The choice of *Arogya Sevika* was left to the Women's Health Group. ANS took the responsibility for selecting an ANM. For that the ANS first conducted a seminar on self-employment for ANMs. More than 60 trained ANMs who were not employed in the government service, attended this seminar. There it became clear that many ANMs were in need of employment and that several of them were willing to set up village health centres on their own if they were given the opportunity and initial support. This is a peculiar situation in Andhra Pradesh, which has the largest number of ANM training schools in the country. Their output is too large for the government to absorb. Thousands of ANMs are working in private nursing homes and hospitals for very low salaries.

The health workers selected in the two villages were (Box 3):

Box 3: Characterisitics of the health workers

Arogya Sevika at Ponnal

- **A young married woman from the village with two grown up children**
- **Educated up to tenth standard, no prior training in health**
- **Nominated by the WHG.**
- **Willing to run the health centre for the remuneration decided by WHG**

Self-employed ANM at Kolthur health centre

- **A qualified ANM from another district**
- **Selected and trained by the ANS.**
- **Previously worked in a private nursing home.**
- **Willing to operate a health centre on a self-employment basis**

Discussions with community members

After ensuring that it was possible to recruit an ANM to operate a village health centre, members from ANS held meetings of the gram sabha (village panchayat) in both the villages. These meetings were conducted in open places where anyone in the village could participate irrespective of caste or economic status. Three such Gram Sabhas were conducted in Ponnal and four in Kolthur. Issues discussed were whether the panchayat would provide space for the health centre, who will maintain the facility, what services will be provided, role of WHG, and how the fee structure would be decided. Villagers in both the villages agreed to provide space and suggested possible sites for the health centre. They made the final decision in consultation with the ANS members.

Negotiations and Bargaining

Negotiating terms for setting up the health centres was an interesting process that took place at three levels. The first level was between the ANS and the villagers. The villagers tried to get the most from the ANS funds for drugs, repairs, maintenance, salaries, etc., while the ANS tried to insist on local resources and participation. The second level was between the WHG and the village panchayat. The women's health groups wanted panchayat contributions and official support for its activities. Panchayats wanted the WHG to generate as much funds through fees and donations as possible. The third level was between the health workers and the WHG. This included

negotiating the terms of work and payment between the *Arogya Sevika* / ANM and the WHG.

Finally the ANS bore the costs of equipment, furniture, records, and training. The panchayat gave a house to the WHG and made necessary repairs.

Recruitment and training

The voluntary Arogya Sevika in Ponnal required repeated and long duration training in basic health care. The training was provided by ANS, and an ANM from the PHC. The training included certain clinical skills such as antenatal examination and care, child care, simple health concepts, high risk assessment, checking blood pressure, giving injections, first aid and simple medication. In spite of repeated training the Arogya Sevika did not feel confident about conducting deliveries. The community did not think she was properly trained because she had not attended any formal training program. She therefore had to enrol for the 6-month Anganwadi Workers training programme provided by the Women's Development and Child Welfare Department.

In Kolthur, the ANM did not need technical training since she had been previously working in a private nursing home. ANS gave her one-month's training mainly in clinic management, accounts and record keeping. This was followed by a short refresher course every three months. She was also asked to make a commitment to work for at least two years.

Setting up of the centres

The project spent about Rs.50,000/- on setting-up the two health centres. This amount excluded payments for the workers and costs of monitoring and mid-term evaluation (Box 4). The project provided a medicine grant of up to Rs. 10,000 per centre to cover their first two years of operation. Thereafter medicines were to be purchased either by the panchayat or by the patients. However, payment to the workers was always the responsibility of the community. In Ponnal, the WHG paid the Arogya Sevika Rs. 450 per month as honorarium. In Kolthur, the ANM earned about Rs. 2000 - 3000 per month from the service charges she collected, using the fee structure decided by the WHG.

Box 4: Direct expenditures from 1996-98

	Ponnal (Rupees)	Kolthur (Rupees)
Community mobilisation	15,000	15,000
Equipment and furniture	13,500	15,000
Records and stationery	2,200	2,200
Drugs and supplies for three months	10,000	8,000
Training of health workers	3,500	-
Support of ANS	5,000	6,500
Total	49,200	46,700

Outcome of the Intervention

Evaluation of the experiment

Three years after the experiment was initiated, three independent investigators evaluated its outcome in February 1999. Data for this evaluation was gathered from 145 households of Ponnal and Kolthur villages, from village leaders, health providers, members of WHG, and government health staff. Their evaluation termed Ponnal a failure and Kolthur a success based on the following findings.

At Ponnal, the evaluating team noted that:

- The village health centre was not functioning regularly
- Villagers did not trust the abilities of the Arogya Sevika and did not utilise her services to the desired extent.
- *Arogya Sevika* did not seem confident about providing health services due to her lack of experience and formal training.
- She did not stock medicines because villagers were not willing to buy medicines from her.
- She did not make village rounds; there was a gap between her and the villagers.
- The village health centre had functioned only for about a year; villagers were mostly going to a private practitioner who had spread the word that the Arogya Sevika was not trained to provide health services.
- The WHG in the village had stopped functioning because of internal fights. As a result, the Arogya Sevika had lost interest in the village health centre and was looking for better avenues of employment.

At Kolthur, the evaluation team noted:

- The village health centre was well maintained and the ANM was

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residing in the centre with her family.

- Since the ANM was well trained, villagers trusted her skills and were willing to use her services.
- The ANM seemed knowledgeable and confident about providing treatment for minor ailments and handling deliveries.
- The villagers paid for medicines. The ANM was able to maintain good stock of medicines, which she purchased from pharmaceutical salesmen.
- The ANM made frequent visits to villagers which helped her build a rapport with them. Women in turn visited her frequently.
- The centre was functioning without a break and round the clock because the ANM stayed at the centre.
- However, the ANM was running the health centre almost as a private practice with little supervision from the WHG.

The household surveys in the two villages also found substantial differences in the awareness, utilisation and satisfaction levels in the two villages (Box 5)

Box 5: Survey results

	Ponnal (n=74) (%)	Kolthur (n=71) (%)
1. Awareness about health centre	85.1	100.0
2. Knew timings of health centre	35.1	98.6
3. Households reported having used the centre in previous 6 months	32.4	84.5
4. Number of deliveries conducted in the centre in one month	Nil	1
5. Respondents expressed satisfaction with centre's functioning	22.8	97.2
6. Thought the care provider had the necessary skills	23.0	84.5
7. Respondents appreciated the attitude of care provider	36.5	98.5
8. Respondents felt the centre should continue to operate	86.5	98.6

Lessons learnt

Several lessons emerging from this experiment can guide efforts to extend primary health care to remote villages. Most large size villages that are located away from the health centre need a village health centre. But to make that centre a success requires several ingredients.

Consensus on establishing the centre

The decision to establish a village health centre was on consensus among village residents, especially among those who were involved in the centre's functioning. Starting a centre involves many decisions, some of which have potential for conflict. For example, the decision about where to locate the centre, what support to provide, how much to pay to the worker, are issues that are potentially contentious. In this experiment most of these issues were amicably settled probably because of the involvement of ANS, a helpful and competent outsider. When a NGO is not involved, a PHC can play that role.

Presence of a support group in the village

The presence of an active and motivated women's health group was very important for starting a village health centre. This group negotiated with the village panchayat and with the service providers to get the best possible terms for village residents. The group provided support to the workers, which the village panchayat could not have provided . In Ponnal village the centre functioned as long as the WHG was active. When the WHG stopped functioning due to internal conflicts, the clinic also became ineffective.

Sustaining worker's interest

The interest of the health worker in operating the centre was the key to sustaining the health centre. In both the villages, the community decided what they would pay to the worker. In Ponnal village the community decided to pay a salary to the worker. The amount was based on the community's ability to pay and not necessarily on what she deserved. Arogya Sevika was dissatisfied with what she received as honorarium and began to look for better alternatives. In Kolthur, the ANM was allowed to charge fees for her service as per the fee structure decided by the WHG. This arrangement allowed her to earn more by providing services, and retained her interest in running the centre.

Quality and accepatability of services

Community's perception of service quality was the key to acceptability of services. The community will be interested in sustaining a health centre if the service provider is perceived as competent, if the services are available at the time of need and the service provider is seen as being helpful and doing her best.

In Ponnal village, the community did not think that the *Arogya Sevika* was providing quality services. There lay the crux of the centre's failure. In Kolthur village, the ANM's services were highly acceptable. Therefore the centre continued to function well even though people had to pay for the services they could get free of cost from the government ANM.

The community not just participated, but also owned the initiative. Though initiative for this project came from a NGO, the village panchayat and the WHGs were aware that the NGO's involvement would be limited and its support would be for the first three months only. Though WHGs in both the villages participated fully, the ownership sense in Kolthur was stronger than that in Ponnal. WHG members in Kolthur village actively sought donations in cash and kind. They devised schemes to generate corpus funds. They organised Shramadans for cleaning and maintaining the health centre. They took pride in announcing the fact that their village was the first to start a health centre of its own. They invited leaders from the surrounding villages, PHC Medical Officers and staff, and also the press to give publicity to their centre.

Community ownership

This experiment showed that a qualified ANM working as a self-employed professional is a more effective option for service delivery in remote villages than a poorly trained woman from the village. This concept needs to be promoted especially in states where unemployed ANMs are many. One should also realise that this concept will work in villages that are remote but not too poor. People must have the need and capacity to pay for services. In the country, there may be a sizeable number of such villages where this option needs to be encouraged, to improve quality and access to primary health care.

Self employed ANM an effective option in remote villages

Case no. 6

Women Centred Health Project

Brihan Mumbai Municipal Corporation, Mumbai, Maharashtra

Dr. Usha Ubale, Ms. Renu Khanna***

The Partners: BMC, SAHAJ and Liverpool School of Tropical Medicine

Objective: Women centric reproductive health services

Background

Addressing reproductive health needs of women is increasingly recognised as a priority area in health care provision. The International Conference on Population Development in 1994, called for a women centred approach to reproductive health, extending reproductive health services beyond family planning services.

The Brihan Mumbai Municipal Corporation (BMC) provides health services to approximately three million women in Mumbai, especially to the poorest women who cannot afford private health services. In 1995, the BMC initiated a woman-centred approach to providing reproductive health services, based on a study which was carried out by them in collaboration with the Women's Health Group in the Liverpool School of Tropical Medicine. This study had investigated the clinical and social aspects of Pelvic Inflammatory Disease (PID), based on data from over 3000 women (Brabin, et al 1998).

This study combined with in-depth interviews with a sub-sample of 250 women about their reproductive health problems, suggested that BMC's reproductive health services must become women-centred.

The Women Centred Health Project (WCHP) is a joint initiative of the public health department of the Municipal Corporation of Greater Mumbai (also known as Brihan Mumbai Municipal Corporation i.e. BMC), a non-governmental organisation SAHAJ located in Baroda and the Liverpool School of Tropical Medicine, UK. The project came into existence in 1996 with a broad aim of improving the quality of health care services, especially those related to women's reproductive health, provided through the health care facilities managed by the public health department of the BMC.

The WCHP was developed to formulate woemn-centric reproductive health services to be provided at the health posts and dispensaries of the BMC.

How the Innovation was Identified

It was found that women who came to the dispensaries of the BMC with infertility problems, clinical symptoms of PID, and for sterilisation operation, faced special problems while seeking reproductive health care. They had no access to information. Health professionals did not counsel them properly. They were not referred

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Need for information, counselling, proper referral and empowerment to make decisions

to appropriate places in terms of time, distance and cost. Women had limited decision-making power in the family including decisions related to their reproductive health. They also needed help to deal with problemssuch as alcoholic husbands and family pressures against accepting family planning methods.

Need to train ANMs to give women-centreic services

Making the services "women-centred" meant health providers needed to be sensitive to their social and familial situation. In order to operationalise the concept of "women-centred" services, the BMC sought the involvement of 30 Auxiliary Nurse Midwives (ANMs). They were given special training to improve their ability to communicate with women about sexual and reproductive health problems. Based on research elsewhere and their own experience, the project staff listed important behaviours of health staff to make their services "women-centred". These were:

- Careful history taking – As it is important for patient-doctor interaction.
- Ensuring privacy - should hold consultation in a closed room. and should seek client's permission if a nurse or a female attendant has to be present.
- Establishing rapport - should make the patient comfortable at the beginning of the consultation and then asked about her complaints. Eye contact should be maintained with the patients to help them develop confidence in the health provider.

  Investing time and patience – should allow the patient to tell her story before asking her about specific symptoms. ANMs should have patience while listening to the patient's problems. Attention should be paid to the body language as women communicate more through their silences.
- Asking open-ended questions- As open questions invite respondents to convey their ideas, feelings and opinions in their own words.
- Using local terminology - Since there is a culture of silence about women's bodies and sex, women often use special terms to describe them. For example, a woman may say Paani Bahar Girta Hai (water falls outside), to explain her husband's problem of premature ejaculation.
- Believing in women - Women should not feel that it is difficult to convince doctors about their problems. ANMs should give them a patient hearing and believe in what they say. If a woman for example, complains of heavy discharge and pain during intercourse, and thinks that it is because of the IUD she is wearing, she should be believed.

- Communicating results of the investigations - should explain results of investigations in simple language if the ANM wants the patient to co-operate in the treatment.
- Reassuring the woman - should reassure the patient about her problem before she leaves the consultation room.
- Motivating women to follow the advice- should express genuine concern for women's health . ANMs should not say- 'if you care for yourself, you won't be doing this or that'.
- Informing women - should explain the reproductive system after finding out what the woman already knows about the reproductive system and the problems related to the system.
- Referring to appropriate place - should consider time, distance and cost for the patient before referring her.

Description of the Intervention

The intervention consisted of making the health staff follow the women centred behvaiousr. As a first step in the intervention, the project staff adopted a charter of client rights (Box 1). It contained six elements: Right information, services quality, confidentiality, compassion, respect and freedom of choice. The project staff organised several meetings with the BMC's medical and paramedical health staff to discuss these elements and to generate their acceptance among the staff.

Client's rights

Box 1: The client's rights

A. Accurate information and skilles care

. Client's should have access to up-todate information
. Client's should have access to the most skilled care

B. Freedom of Choice

. Client's are entitled to information that will help them makedecisions

C. Confidentiality and Privacy

. Client's must have assurance that the information sought by medical staff will remain confidential
. Client's are entitled toprivacy while they receive services (protection from the sight and hearing of others)

D. Compassion, Respect and Understanding

. Client's should always be treated with respect, regardless of their social status or way of thinking information

The intervention was implemented in 30 municipal health facilities of the two wards on a pilot basis. Health facilities where the staff was keenly interested in the intervention were selected in the first instance. A checklist of behaviours was finalised, the staff trained in using the checklist, and was asked what additional inputs or facilities they needed to implement the behaviours in the checklist. The project staff ensured that inputs like curtains (for privacy), medicines, equipment etc. were provided to these hospitals as required.

Checklists of behaviour

Each hospital designated an observation team of four to five members, consisting of medical and paramedical staff. A team from one hospital visited another hospital on any random day every month, to observe the behaviour of staff while providing services. They used the checklists to mark down which behaviour was followed and which one was not. Separate checklists were developed for medical and nursing staff, for pharmacists, for registration counters and ward attendants, each list containing appropriate behaviours for the staff.

Observation terms

At the end of the day, the visiting team met with the hospital staff and discussed its observations. During these sessions, the visiting team praised the positive findings, tried to find out reasons for negative behaviour and devise ways to improve the situation.

Outcome of the Intervention

The expected outcomes of this intervention were: improved satisfaction of women with hospital services and increased number of women coming for reproductive care. Before starting the intervention, exit interviews were carried out on women who came for services. The poll mainly tried to assess clients' perception about service quality and their satisfaction with the behaviour of the staff.

Interviews with the staff showed that they were more sensitive to women's needs and enjoyed the response they received from the clients when those needs were met. In these hospitals, there were visible changes in the way women walked into the hospital — smiling and without fear. They were greeted by the staff at the gate and at the registration counter. There was a sizeable increase in the number of women coming for treatment and their repeat visits (Box 2).

Increased staff sensitivity and satisfaction

Box 2: Caseload before and after intervention

No. of women with	Before (1998- 99)	After (1999-2000)
Menstrual Problems	523	996
RTIs	563	971
Infertility	158	209
ANC	1416	6568
Total	2660	8744

(Source: Clinical Cases Report, G/N Ward)

Lessons Learnt

Sensitisation needed on women's special health problems

Doctors and nurses in these hospitals took a keen interest in making their services women-centred, only when they were convinced based on research that women indeed had special problems. The training to sensitise them to women's speical health problems was very intensive and innovative. Their training involved experiencing the difficulties women face in talking about their health problems. Many vivid real-life cases were discussed in the training, which perhaps strengthened their commitment and interest in helping women. Generating this interest and commitment in the health staff was a major achievement of the project. In a public system both these are rare commodities. Achieving the same on a larger scale, involving all hospitals, would require time and patience.

Lateral monitoring system by peers

The lateral monitoring system, helped increase involvement of health staff. Usually monitoring is done by supervisors or by outsiders. Here it was by colleagues. It was time consuming and could not be sustained on a monthly basis. However, such monitoring, even less frequently, seemed to produce better impact than regular monitoring by supervisors.

Limitations; Managing incerased numbers

But one of the constraints of this innovation was its success. As women found visits to the hospital to be pleasant, their visits increased rapidly. This meant staff had less time for each patient and could not provide special attention to women with special problems. The doctors wanted a screening method by which routine prenatal cases would be seen at the health posts or by paramedical staff, while they could concentrate on RTI/STI cases.

Case no. 7

Increasing Condom Use to Promote Reproductive Health

South 24 Paraganas District, West Bengal

Dr. K. Pappu*,
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Background

This case study describes innovative methods employed under a programme sponsored by the DFID to promote use of the condom as a safeguard against sexually transmitted infections.

In India, the condom is viewed more as a birth control method and less as a protective device against Reproductive tract infections (RTIs) and Sexually transmitted infections (STIs). In the early years of the family planning programme, the government agreed to introduce the diaphragm and jelly but not the IUD and the Oral Pills. However, women were reluctant to use both these methods because of lack of privacy in Indian homes. They also deemed it immodest to use them, as that implied their taking active interest in sex while social norms required that they be passive acceptors in this act. Interest in sex and initiating it was viewed as the male prerogative. Hence, the condom was more acceptable to them because it was a male-controlled method.

However, studies found that men did not use condoms in rural areas because the supply was not regular and the condom reduced sexual pleasure. The program also had failed to promote condoms as a contraceptive method because most program activities were focused on women; men were not involved in family planning issues. Consequently after IUD and Oral Pills were introduced in the family planning program, their use increased more than that of condoms despite their side effects. Though women were not supposed to take an interest in the sexual act, it was they and not the men, who were held responsible for spacing and controlling births. The overall use of spacing methods however, remained low.

In 1995, the Child in Need Institute (CINI) implemented a programme that promoted condom use in some of the known red-light areas of Calcutta and its suburbs, as a safeguard against sexually transmitted infections. During this programme, the implementors had found that men, who were reluctant to use condoms for reasons such as lack of sensation and sexual pleasure, came forward to use them to prevent sexual diseases. This trend resulted in increased sale of condoms which were available through commercial sex workers themselves.

The Partners: CINI with support from MacArthur Foundation

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How the Innovation was Identified

The CINI action ersearch project - male invlvement in reproductive health programme.

In April 1998, CINI initiated an action research project, funded by the MacArthur Foundation, in two rural blocks of South 24 Parganas district of West Bengal. This project focused on increasing male involvement in reproductive and child health services. The project covered 2000 married couples of reproductive ages from five villages, 1200 belonged to four villages of Bishnupur block and 800 to a village in Diamond Harbor block. As a first step in this project, CINI carried out a baseline survey, using qualitative and quantitative methods to find out the existing levels of male involvement in reproductive health program, and ways to increase it.

Findings of the survey on use of condoms

One of the findings of this survey was that oral pill use for birth spacing was much higher (over 42%) than that of condom (8%). Further, those who used condoms mentioned three main reasons for use: low cost (31%), easy to use (45%) and good for health (31%). Majority of users were the newly married couples who used it to delay the first pregnancy. But they were not aware that the condom could be used also for protection against sexually transmitted infections. Some respondents said that condom use was good for health because condoms did not have any known side effects like the oral pills. The other findings were (Box 1):

Box 1: Survey findings

- ***Young men (<30years) visualised condoms primarily as a birth control method and not as a barrier against STIs/RTIs/HIV/AIDS.***
- ***Condom use was reported in affectionate and regular relationships and not in occasional and commercial relationships.***
- ***Condom use was rarely promoted or discussed by doctors and other health care providers.***

Notion that condoms reduced sexual pleasure

Both men and women cited many reasons for not using condoms, including the fear of condom failure, reduced sexual pleasure and irregular supply. However, the most important and often cited reason among them was reduced sexual pleasure. The notion that condoms reduced sexual pleasure was so ingrained in their minds that both men and women often reacted violently to the mere suggestion of condom use.

Their awareness about sexually transmitted infections was also abysmally low. Even those who knew names of some of the infections did not know their symptoms. Many male respondents knew the common symptoms of STIs but did not know their mode of transmission. They mentioned causes like unsanitary conditions, excessive masturbation, and taking hot and spicy foods. But most men knew that AIDS was a major fatal disease spread by the commercial sex workers.

Low awareness about STIs

This data seemed to suggest that condom use could be increased by sensitising men about its advantage of protection against STIs, RTIs, and HIV/AIDS and by creating an effective social marketing network to ensure regular availability of condoms. Health workers and doctors needed to promote condom use for health reasons and not only for family planning. The data also showed the need to find appropriate communication channels to promote condom use among males. Female health workers were able to reach rural women but there was no similar channel for men. Since the survey had reported that the main source of information for men was other men, mostly friends, CINI decided to explore the concept of "peer educator" to promote condoms among men.

Need for effective social marketing network

Description of the Intervention

This innovation was a part of the project designed to increase male involvement, in reproductive health matters. The focus on the condom was expected to achieve both, prevention of STDs/RTIs and increasing male involvement in reproductive health.

Condoms as protection against RTIs/STIs

The innovation designed by CINI had two components. One component was to promote condom exclusively as protection against reproductive and sexually transmitted infections. The hypothesis being tested in this component was that if men were convinced about the use of condoms as protection against sexual infections, they might also use them for family spacing.

The second component was Peer educators, who were trained and motivated to promote condom use among men. They were respected men in the community, who were young and energetic and had reputation of being helpful.

The peer educators were expected to play a very important part in bringing about behavioural change in the community. They were the ones expected to make the programme sustainable, because they were to remain in the community long after CINI would withdraw

Peer educators as link between community and CINI

from it. They were the ones to whom villagers would go anytime to ask for information and discuss problems. They were expected to form an important link between the community and CINI.

Box 2: The implementation steps

- ***Identifying potential condom users***
- ***Recruiting male peer educators to counsel males on reproductive and family health***
- ***Making condoms available through peer educators and through other regular sources***
- ***Training health workers in couple counselling***
- ***Conducting male clinics that focus on diagnosis and treatment of RTI/STD***
- ***Mobilizing Gram Panchayat members and other grass-root workers to reach men***

CINI recruited 20 male peer educators for the social marketing of condoms.

To implement the innovation, CINI first recruited family planning counselors, communication experts and Social Scientists on part-time basis for developing IEC / training material, training peer educators, and monitoring the progress of work. At the field level, CINI sought help from different government and non-government agencies to implement this innovation. Sometimes CINI held joint clinics with the PHCs, where men were provided treatment and counselling for reproductive health problems.

Training of peer educators

Peer educators, provided training to health workers and panchayat members. They organised counselling for couples by experts and CINI staff. They marketed good quality condoms and organised IEC campaigns to promote "condom for health protection"

Staff responsibilities

The project staff consisted of a Project Co-ordinator, one Medical consultant , two Supervisors, five Field Workers, and ten Peer Educators. In addition, part-time health and family planning counsellors, communication experts and social scientists provided inputs such as training, IEC, and counselling services.

Box 3: Barriers to condom use

- *Non-availability of condoms in villages*
- *Poor quality of the condom*
- *Inadequate knowledge among men regarding condom use*
- *Concerns about how to store and dispose condoms after use*
- *Social / Cultural / Psychological barriers associated with sex*

Promotion of condoms

The Peer educators promoted condoms among many diverse groups of men such as college students, members of youth clubs, businessmen, and both skilled and unskilled workers focussing mainly on removing some of the barriers to condom use (Box 2). Different groups were allotted different peer educators. They were expected to counsel the group members on the place from where they could get a regular supply of condom, what is meant by correct and consistent use of condoms, how to dispose them, and what are various health benefits of condom use. During these sessions special emphasis was given to live demonstrations.

These sessions were held once or twice a month for both adult and adolescent groups separately in the villages at times convenient tothem, either at noon or in the evening. The group (usually of 15 participants) met with two peer educators. They discussed matters pertaining to safe sex after which the peer educators supplied them with condoms.

The project supplies to peer educators ample quantities of good quality condoms. In the beginning of the project the condoms were supplied free of cost. Later they were sold at a subsidised price. In the second year onwards the condoms were sold at the regular cost with a 10 percent commission to the peer educators on every packet sold. Government health workers were asked to sensitise couples on the added advantage of condoms as a protective device against sexually transmitted infections, in addition to their use as a birth control measure.

Implementation Experience

As CINI was working in the project area for a long time, the people implicitly trusted CINI's staff and their suggestions were accepted easily by them while making decisions regarding family planning or

People's trust in CINI

treatment of sexual diseases. Along with CINI, another NGO, the Rising Sun Club of Kamarpole, was also involved in motivating the male members of the community to seek treatment of RTIs from qualified medical practitioners. Peer educators were counselling men while government health workers, who were very active in delivering health care services, were effective in guiding women in matters related to reproductive health.

Social marketing through peer educators

Initially the social marketing of condoms was planned through channels such as drug stores and petty shops. But later this task was handed over to the peer educators to give them some monetary incentive. Peer educators were provided with condoms and were paid a fixed amount of Rs.10/- for every 100 condoms they distributed. This arrangement, it was found, increased their credibility in the community.

Role models

For promoting condoms, young couples from educated, well-off and respected families were targeted first, who could then act as role models for others. Social marketing of condoms by peer educators helped to increase the sale and use of condoms in the project area. Co-operation between the government and non-governmental agencies helped produce better results towards the end of the first year.

Symptoms and diagnosis of RTI/STI

During implementation however, it was observed that people who suffered from reproductive or sexual health problems sometimes did not attribute the symptoms to any disease needing treatment. Sometimes they preferred to ignore the symptoms out of shame. Sometimes lack of money and time came in the way of their seeking treatment. Peer educators addressed two out of these three constraints. They educated men about symptoms of RTI/STI and emphasised the need to take treatment. Group discussions and counselling helped them get over the shame and fear to some extent. Male clinics were meant to improve access to services, saving them both time and money. These clinics were run by CINI and at times senior consultants from both Government and Private sectors came there to hold joint clinics. Since services available at these clinics were of good quality people came to these clinics regularly also because CINI maintained confidentiality in each case.

Intervention costs

The direct cost of this intervention was Rs.150 per couple who availed of any reproductive health service. This included costs of peer educators, their training, cost of running both male and female clinics, other administrative costs of the intervention.

Outcome of the Intervention

The project is still in progress and its evaluation will be carried out in the year 2001. However, CINI has conducted an interim annual evaluation, which showed that the innovation is likely to produce the desired outcome. The project has successfully completed several project activities and registered improvement in certain progress indicators (Box 4). In addition the project had:

On going project

Ø Identified a group of influential male peer educators to work exclusively with male members of the community.

Ø Registered all eligible couples in the project area and recorded their family planning status.

Progress Indicators

Ø Identified unprotected couples who would be potential candidates for male contraceptive methods like condoms and vasectomy

Ø Trained peer educators and government health workers in proper counselling techniques in reproductive health and family planning

Ø Initiated male clinics that provided services focusing specially on STD/RTI/HIV/AIDS.

Box 4: Progress indicators

Progress Indicator	Before Project	One year after*
Users of condoms	8%	21%
Sale of condom through peer educators	Nil	2820/ month
Number of clients attended male clinics	Nil	11/week
Cases of RTI/STI treated in the clinics	82/year (1996-97)	3172/year (1998-99)
RTI knowledge among males	16%	35%

*: The first year was devoted to the Baseline survey and developing a strategy for the programme implementation.

Lessons Learnt

Through this experiment, CINI developed a number of insights into delivery of RCH services which were likely to have a significant impact on the programme outcome. These were:

Differences in care seeking

· While dealing with reproductive health problem care seeking behaviour was different. Women preferred to go to government health workers because they knew them. Men preferred to go to private doctors who they did not now.

Decision making

· Decisions regarding use of spacing methods or seeking abortion were usually taken jointly by couples. However, decisions related to seeking treatment for RTI/STI were taken alone without consulting partners.

Effectiveness of RH services

· Reproductive health service that includes men's reproductive health concerns as well as their concerns about relationships between men and women were more effective than those that focus exclusively on women.

Different perceptions

· Nearly fifty percent of men, specially unmarried men, believed that if they suffered from sexually transmitted infections for a long period, their married life would be adversely affected. Therefore, most of them sought treatment as soon as possible. But there were many who did not know the consequences of RTI/ STI and what to do when they suffered from such a disease. The health system should be aware of this group of people and not feel satisfied by treating only those who seek treatment.

Thus social marketing of condoms through non-government channels such as peer educators is more effective when both government and non-governmental channels function in tandem by supporting each others activities.

Background

Case no. 8

Health Sector Reforms & Development Programme

Bhadrak & Ganjam Districts, Orissa

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The Partners: OHFWP and DFID

For Strengthening District Health Management (SDHM) initiative

This is a case study of an innovation in which Orissa government in partnership with Department of International Development (DFID previously ODA) undertook policy reforms at district level to improve the maintenance of health buildings and provide mobility support to health staff.

DFID working in India through British High Commission, had been providing technical assistance to the Orissa Government's Health and Family Welfare Programme (OHFWP) since 1989. The first two phases of this assistance focused on constructing or upgrading 2,893 health facilities, half of which were sub-centres. They also included provision of basic and in-service training to the health staff, including training to district health officers in management, IEC and Management Information System. At the end of these two phases, the state had completed training of all the health staff and had created additional health infrastructure in 22 out of 30 districts in the state.

However, an Impact assessment carried out in early 1996 by a team of Consultants from United Kingdom , had concluded that the first two phases of the DFID support had failed to improve the access and quality of primary health care. This assessment had attributed the failure to continuing problems with resource availability, and to the mismanagement of available resources.

One of the activities of Phase II that guided the course of future support from DFID, was the Strengthening District Health Management (SDHM) initiative. This initiative involved improving districts' management capacity to reduce wastage and increase utilisation of available resources. This initiative was implemented in two blocks each of two districts, Bhadrak and Ganjam.

One of the lessons learned from this initiative was that strengthening programme management and improving resource utilisation required changes in programme policies and procedures. But based on the experience of this initative , DFID, in its Phase-III support, decided to focus on changing policies and procedures as well as on providing critical resources that were needed to improve quality and access of health care services.

DFID's phase-III support to Orissa began in April 1998. Its overall objective was to improve quality of and equity in the delivery of primary health care. This support was provided in two stages. In

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stage one, DFID provided support to the Orissa Government to develop a set of feasible and affordable policy/procedure reforms and experiment with them in two districts. In stage two, the support was to be provided to extend the effective reforms to the remaining districts in the state.

Keonjhar & Bhadrak districts

The suggested reforms were to be implemented in two districts Keonjhar and Bhadrak, one tribal and one non-tribal district. These two pilot districts together covered about 1.3 million population, served by 15 Community health centres (CHCs), 63 single-doctor Primary health centres (PHCs) and 316 Sub-centres.

How the reforms were identified

Community Consultations

To identify the reforms, the Project Management Unit held one-day workshops in each of the 20 blocks of the experimental districts. The participants in these workshops were the members of the Gram Panchayat, women's groups, functionaries of local non-government organisations (NGOs), government health workers, Anganwadi workers, teachers and village health volunteers. In these workshops participants discussed various topics such as:

- How can the coverage and quality of health services be improved?
- How can a community support health workers?
- What role do health supervisors play?
- What kind of services does the community expect from the health system?
- What are the shortfalls in health services and why?

These discussions generated a lot of information about the field conditions, especially about the shortfalls in non-salary budgets, sometimes as high as 50 per cent, and how they affected outreach activities of workers, maintenance of buildings, equipment, vehicles, supply of drugs and other consumables. Some specific problems identified were:

- Female workers were overworked while male workers were under-utilised.
- Many villages did not have proper places to hold clinics and camps.
- Health workers were not visiting villages because they were not paid travel allowance (TA).

It was felt that as a result of these problems, service availability and quality suffered badly. People did not use PHC services because there were no medicines; doctors and health workers were not available at their posts; and buildings were not clean.

Subsequently, district level consultations were held among district health officers, senior engineers from rural works, and community development program officers to identify priority areas for reforms. The areas they identified were maintenance, mobility and medicine (3-M). The specific recommendations that came out of these consultations were:

District level consultations

· Improve maintenance of buildings, equipment, instruments and vehicles.

· Increase staff mobility.

· Improve the availability of medicine in all health institutions.

· Strengthen the Subcentres

Priority areas identified for maintainence, mobility and medicine (3-M)

District health team also identified specific reforms needed to overcome the 3-M constraints and estimated the resources required for implementing those reforms. The reforms dealing with building maintenance and mobility support the team said, could be implemented at the district level while those dealing with medicine availability had to be implemented at the state level.

The remaining part of the case study therefore describes the reforms dealing with building maintenance and mobility support that were designed and implemented at the district level.

Organisational set up

To provide technical and administrative support to the reform process, the Government of Orissa established several committees at the state and district level and delegated necessary power to the districts to facilitate the implementation process.

The highest level body was the Project and policy review committee (PRC) which had representatives from the Government of India, Government of Orissa and the DFID. The State Chief Secretary chaired this committee which met at least once a year.

Project and Policy review committee

At the state level, a steering committee was formed also, chaired by the Chief Secretary. Its members were secretaries from Finance, Health, Planning, Public Works and Rural Development, Director

A Steering committee

of Health and Family Welfare Services; the project co-ordinator and the chief engineer. This committee facilitated inter-departmental co-ordination and ensured that all relevant departments were consulted in the reform process. It also authorised procedural changes, cleared administrative bottlenecks and monitored the progress of the reforms.

Zilla Swasthya Samiti (ZSS)

At the district level, administrative responsibility for the reforms was assigned to the Zilla Swasthya Samiti (ZSS), which is a registered society. The District Collector was the chairperson of this society and its members included the Zilla Parishad chairman, District Medical Officers, officers from other government departments and local NGOs. The ZSS was authorised to receive and disburse the funds earmarked for building maintainence and review and monitor their implementation in the district. District health teams (DHT) whose members were the Chief District Medical Officer, the Assistant District Medical Officers and block and sector level medical officers, were expected to plan and implement the building maintainence and provide feedback to the Project Management Unit about their progress.

Orissa Health & Family Welfare Society

In order to facilitate the fund flow to the districts, the Government had formed a Orissa Health and Family Welfare Society, instead of using the finance deparment, through which the state government released funds directly to the ZSS. Other district disease societies such as the Blindness, Leprosy and Tuberculosis societies were amalgamated under the ZSS to improve co-ordination among various health programmes.

Contents of the Reforms

Reform 1: Authorise the PHC/CHC Medical Officer to Carry out Petty maintenance of Building

Building maintainence: A stitch in time for minor repairs

The constraints in building maintenance were identified as — lack of adequate resources and long drawn-out procedures for getting the repairs done. If a PHC doctor requested any repair, the rural works department usually did not respond promptly. The department was too busy with larger repair / construction activities and could not spare time to attend to minor repairs requested by the PHC doctors. The doctor was not authorised to get the repairs done locally. Therefore he would ignore the minor repair problems which would then become larger problems, requiring more resources and more time to set things right.

To deal with this problem, the reform suggested was a system in which petty maintenance, annual maintenance and major repairs would be dealt with differently at different levels. In case of petty maintenance, the DHT decided to authorise the Medical Officers at the health centres to carry out the repairs. An engineering cell was established in the ZSS to co-ordinate the maintenance activities. This cell assisted the ZSS in carrying out surveys of building conditions, preparing estimates for repairs, supervising of work etc. The concerned engineer from this cell gave the task completion (technical) certificate for petty and annual maintainence work done by medical officers.

Different levels to deal with building maintainence

This DHT would assess the needs for petty maintenance such as for fixing windowpanes, repairing of tube well or replacing a non-functional switch. It would carry out the repairs and then obtain task completion certification from block engineers. For annual maintenance activities such as whitewash and campus beautification, the DHT had to seek prior approval for the cost estimates from the ZSS. The DHT would then carry out the task either through local contractors or through block level engineers. The block level engineers had to issue a task completion certificate before the payment could be made.

For larger repairs like introducing a drainage system or repairs after a natural calamity, the maintenance committee would only list the required repairs, obtain cost estimates and submit a proposal to the ZSS. The ZSS could execute the task, either through the block level engineers or through the Rural Works Department. Final payment would be made only after the Medical Officer certified that the work was satisfactorily completed. To facilitate this system, a few budget norms were set for maintenance cost according to the type of maintenance and facility (Box 1).

Box 1: Norms for maintenance cost by type

Type of Maintenance	Type of facility	Amount (Rs.)
Petty Maintenance	Government owned subcentre buildings	500
	Rented subcentre buildings	100
	Single doctor PHC	2,500
	CHC	6,000
Annual	Government owned subcentre buildings	2,500
	Single doctor PHC	5,000
	CHC	35,000

Reform 2: Fixed Travel Allowance for All Health Staff

Since non-payment of the Travel Allowance was another constraint affecting the outreach work and morale of the staff, the DHT felt that paying fixed travel allowance would significantly improve health care delivery in the district. To decide the amount to be paid as fixed TA to each staff member, the DHT used the fixed tour programme of each category of staff, calculated their number of tour days, the kilometres they would travel and the cost of travel by public mode of transport. Using this method, they proposed a fixed TA for each category of staff, which the state later revised (Box 2).

Box 2: Travel allowance by category of staff (in Rs)

Staff	Proposed Norms	Revised Norms
Health worker (F) and (M)	250	200
Health supervisor	300	250
BEE	350	300
Single doctor MO	450	500
CHC MO	450	400–500
Driver	300	250

Another idea introduced into this reform was that female health workers could take helpers along on field visits to improve her mobility. The government would pay such helpers Rs.100 per month. But if the ZSS was not satisfied with a staff members' performance based on performance indicators listed in Box 3, it was authorised to cut the TA by 25 per cent.

DHT was required to ensure that:

- TA was be disbursed regularly in the first week of each month;
- TA payment was made by cheque;
- Performance certificate from the supervisor was obtained while paying the TA.

Box 3: Performance indicators by category of staff

Category of Staff	Indicators
Health worker	Stay at headquarters
	Ensure maintenance of subcentre building,
	Meet the performance norms of service delivery
Health supervisor	Tour for at least 15 days per month
	Attend 1 Subcentre clinic &1 immunisation camp per week
	Visit two villages per week
	Attend PHC/CHC supervisors' meetings every week
	Attend subcentre meetings with the community
Sector Medical Officer	Remain at headquarters
	Tour 12 days per month
	Attend one subcentre clinic per week
	Visit two villages per week
	Attend weekly sector meetings
Block Extension Educator	Tour 12 days per month
	Visit all sectors in a month
Block Medical Officer	Tour 10 days per month
	Visit all sectors in a month

Implementation Experience

The DHT first prepared implementation guidelines for the reforms. They included the expenditure norms along with the implementation procedures to be followed, by the implementing authorities.

Based on those guidelines, DHT also developed the district plans that contained budgets for each health institution to carry out petty maintenance and provide fixed travel allowance to its staff. The maintenance plan of the district had specified the type of repairs and the number of institutions that would carry out such repairs in that particular year. At the end of this exercise, each institution knew the amount it would receive to implement the reforms.

Because of the special institutional arrangements made by the state for smooth fund flow, the districts received their planned budgets almost immediately. They were also able to release the required funds to the block level institutions without much delay.

Insistence on transactions by cheques: A problem

But fund-flow problems arose at the levels below the block. The Padmapur CHC, for example, had received about Rs.14 lacs to implement the two reforms for a six-month period from April to December 1998 but could not release any funds to the PHCs and subcentres under its jurisdiction because the ZSS insisted on cheque transactions. To open an institutional bank account below the block level required a government order, which the government had not issued. The PHC staff had personal accounts but government money could not be deposited in those accounts.

The CHCs also faced difficulties in disbursing the TA amount through cheques. Many health workers did not have bank accounts. Some found this arrangement too cumbersome for the small amount they were expected to get. Going to banks meant costs in terms of time and money, which the TA amount did not justify. Only 20 per cent of the TA amount had been disbursed during a 6-month period because many workers had not opened a bank account.

But at the CHC level, the funds got used for petty maintenance. Some Medical Officers were very enthusiastic about this scheme. At one CHC, the doctor spent more on petty maintenance than the CHC's allotment. He had painted cots and bedside tables, had planted some saplings in the CHC campus with metal fences around them and was waiting for his second instalment to paint the OT table and repair all chairs. The excess amount he had spent, he was confident, would be adjusted against the second instalment of funds.

Need for procedural changes and refinements

The ZSS had also initiated annual maintenance activities such as repairing of roofs, filling cracks in the walls, whitewashing some buildings etc. However, as these activities were being implemented, the project managers were able to identify several procedural changes and refinements that were needed to make the reforms effective. For example, it became quite clear to them that both the reforms could not be implemented at the sector and sub-centre levels without disbursing funds in cash. But cash transactions were not acceptable to PHC medical officers. They did not want to receive large amounts of government money in cash.

Delay in technical certification for petty maintainence jobs

Technical certification of the petty maintenance jobs was another problem. There were many complaints about the delay in issuing completion certificates.In Jangira PHC, for example, although the repairs had been completed, payment to the contractor was held up for about a year because the block engineer had not certified the work. The ZSS had to find a solution to this problem such as requesting the co-operation from Rural Works Department, using

the Panchayat engineers for certification and even appointing private consultants.

Outcome of the Reforms

External evaluation

Two years after the reforms were implemented in the pilot districts, an external agency carried out an evaluation of the petty maintenance scheme that focused specifically on the extent of planned work implemented, benefits that accrued to the institutions and quality of work done.

Petty maintainence scheme appreciated by CHC MOs

The study reported that, "CHC medical officers, by and large, appreciated the petty maintenance scheme and utilised almost the entire amount alloted to them on different maintenance activities. But the quality of work was far from satisfactory. Only one-third of them could execute the work in a satisfactory manner".

Reasons for poor quality of work

Notwithstanding the usefulness of this reform, many medical officers did not appreciate it because it meant taking responsibilities unrelated to their profession. They did not know how to assess the condition of the building, and its maintenance needs. Some senior medical officers who could use these amounts and were satisfied with the reform, also reported problems such as not finding skilled workers and not having enough time for additional responsibilities. But they supported the scheme in spite of these problems.

Most medical officers wanted the amount for petty maintenance to be increased because their needs were numerous. They also wanted technical persons, preferably from the Rural Works Department, to assist them. The evaluation study had concluded that the petty maintenance scheme was a significant step towards better management of assets of the health care institutions in rural areas. The agency recommended that the scheme should be implemented in a phased manner, starting with willing doctors who were interested in their asset management.

TA scheme: not much benefit to workers

The reform related to mobility support was not formally evaluated. Though workers were reportedly happy about it because they could expect early payments of their dues, they did not benefit much from the reform. They still had to submit their tour program as before; obtain performance certificate from their supervisors, which was a new requirement, and received payments by cheque for which they had to travel to the block head-quarter. They wanted their fixed TA to be paid along with the salary (as is the practice in some other states).

Supervisors however liked the scheme because workers did not receive fixed TA automatically. Supervisors' assessment of workers had a role in that process, which meant more power to the supervisors. Most of them reported increased field visits by them and by workers, though actual payment of TA had not increased substantially.

Lessons learnt

Decentralisation in decision making

The innovations attempted in this state came under a broad area of systems reforms to enable the health system to function better. They were also consistent with the national policy on decentralisation in decision making. Since the state and district officers had designed these innovations from within the government system, their replicability was not in doubt. If they could produce the desired improvement in service quality and access, their acceptance in the government system was ensured. But their sustainability depended on the availability of additional resources, which the DFID had assured for the project period but not beyond.

Sustainability issues

Critics of this project point out that those reforms that depend on an external source of additional funding are not sustainable because the state government is not in a position to provide such resources. To make them sustainable, the government would have to explore options like introducing user charges, handing over institutions to NGOs or private organisations or mobilising resources from the community and business organisations.

Though most people easily recognise the non-availability of resources as a constraint, this experiment highlighted how systems, procedures and people can also be constraints. For example, though funds were available for petty maintenance schemes, the system could not release the fund below the block level because government bank accounts could not be opened. Similarly the system's insistence on making cheque payments stalled the disbursement of funds.

The reforms had to be accompanied by changes in procedures. Unfortunately, some of the new procedures did not help to further the reform's objectives. For example, though doctors were allowed to undertake petty maintenance of their buildings, their work had to be certified by engineers, which led to delays. This reform also meant that doctors had to accept responsibilities for which they were not trained. They did not know how to assess the repair needs of their buildings or check for quality of work. The system did not provide them support like technical assistance, information about building conditions or special training on petty maintenance. The experience

showed that system reforms could not be implemented unless management's capacity to implement such reforms could be enhanced.

Multiple benefits of system reforms

System reforms usually have multiple benefits, both direct and indirect. For example, the fixed TA reform not only increased workers' visits to villages but also improved supervision of the workers. This was because the scheme used supervisors' assessment of workers' performance to decide whether workers should receive the allowance. Thus, by strengthening the supervisory role, the reform also helped to increase their involvement in the program.

Similarly petty maintenance reform was expected to improve utilisation of health institutions because the poor condition of buildings was one reason why service providers and users were not coming to the health facilities. At the same time, by empowering Medical Officers to carry out routine maintenance, the reform achieved two things — improved condition of buildings and increased involvement of doctors. These two changes together could be more effective in increasing facility utilisation than either of them, alone.

Both the reforms also have the potential to improve the image of the health system by adopting transparent procedures, stemming pilferage and reducing negligence. These three are essential ingredients for making efficient use of resources and thereby

Case no. 9

Quality Improvement Programme: Reproductive & Child Health Project

Uttar & Dakshin Dinajpur Districts, West Bengal

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The Partners: Government of West Bengal & DFID

Discussions with programme managers, heaqlth workers & community

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Background

A Reproductive and Child Health Project aimed at bringing improvements in quality and accessibility of RCH services is being implemented in three districts of West Bengal (Malda, Uttar Dinajpur and Dakshin Dinajpur) by the government of West Bengal with the support of DFID. The preparatory phase of this project started in November 1996. In this phase, many activities were piloted to identify technical strategies, structures, systems and funding channels to improve quality and access of RCH services. One of these activities was a Quality Improvement (QI) Programme. This program was initiated to provide a deeper understanding of the problems involved in delivering RCH services and test the efficacy of different interventions to overcome those problems.

How the Intervention was identified

The QI Programme was developed in the wake of the Community Needs Assessment (CNA) approach adopted in the national RCH programme. The CNA approach emphasised improving service quality, promoting community participation and encouraging bottom-up planning based on service needs of the community. CNA approach however involved preparation of annual RCH plans at the sub-centre, district and state levels by merely assessing community needs for existing services. It did not provide any scope for designing, funding and implementing locale-specific solutions to local problems. It also did not address issues such as cumbersome management and financial procedures in the existing system, which made local initiatives difficult.

The QI Programme was designed to address these weaknesses of the CNA approach. The project was to provided financial, technical and administrative support to the district and block level officers to strengthen their capacity to plan and implement local solutions and thus improve quality and availability of RCH services.

The QI Programme was designed, after extensive discussion with programme managers, health workers and community members and leaders. It involved health workers and community members working together as a team, analysing the problems related to delivery of RCH services through the primary health care system, selecting

solutions to resolve those problems, and implementing them. The project provided funds to implement those solutions.

Description of the Intervention

The QI Programme was initiated on the premise that service quality and access would improve if service providers could assess the quality of services they provided, could identify the interventions and had resources to implement the interventions. This premise was developed drawing on the Bruce's Quality of Care framework, COPE model of AVSC and Service Quality Improvement process developed by Hardee and Gould. The QI program took health workers and community members through a series of steps (Box 1).

Service providers assess the quality of services they provide

Box 1: Steps in QI programme

- **Selection of a priority service**
- **Identification of quality and access problems**
- **Formulation of an intervention for improvement of quality and / or access**
- **Implementation and review of the intervention**

These steps were presented in a manual that described, step-by-step, the QI process and the tools that could be used during this process. The manual also listed a range of feasible interventions that may be needed in the RCH services. It described a quality assessment matrix. It provided information on writing of proposal, developing criteria for evaluating the interventions and available channels of funding.

Manual and tools for QI process

The QI process was then discussed in workshops conducted in the three project districts. Among those who attended the workshops were health staff, ICDS functionaries, staff from other development departments, and community leaders. At these workshops, a decision was taken to start this process at sub-centres, followed by sectors and block levels, leading ultimately to a block QI plan. The intervention was to hold monthly QI sessions at sub-centre, sector and block levels, in which priority problems and their solutions would be identified using the tools provided in the manual and facilitated by trainers in the project.

District level workshops for block level QI plans

Project development team

Five individuals from outside the government health department, who had relevant experience with QI, were recruited on a contract basis to form a Project Development Team (PDT). This team was given a four-week training in facilitating the QI process. An officer of the State Family Welfare Bureau was appointed as PDT leader and district family welfare officers became Deputy PDT Leaders to achieve co-ordination between the QI process and the government health system.

Implementation Experience

Block level training

Following the district level workshops, PDT members conducted block level training on QI methodology for PHC and sub-centre staff, panchayat members, schoolteachers and Anganwadi workers. The manual was translated into Bengali and made available to all PHC and sub-centres. They were also given a list of activities that would not be funded under the programme. "Non-fundable" items included new construction, repair of staff quarters, installation of electricity and water supply, purchase of vehicles and installation of telephones. Fundable items included engaging non-governmental staff on contract basis for specific services, travel allowance for increasing workers' mobility in the field and purchase of approved drugs where necessary.

QI process at the block level

Each PDT Member was assigned a block where he/she would facilitate the QI process. Contrary to the earlier decision to start the QI process at the sub-centre level, the process first started at the block level for the block health staff and panchayat leaders. Next, the meetings were held at the sector level for ANMs and health supervisors. Sub-centre level meetings with panchayat members, AWW, literacy volunteers, CHGs, dais and community members, were very few.

Several changes in the original model took place. This was expected, since the process was never meant to be prescriptive, but rather evolving as it moved forward. PDT members attended as many of these meetings as possible.

QI plans

An ANM or a health supervisor usually prepared the QI plan for sub-centres. These plans were aggregated at the block level QI meetings to prepare a block QI plan. The block medical officer, block development officer, the panchayat president (Sabhapati) and community development program officer (CDPO) approved the

plans. PDT leaders then scrutinised the plans to ensure that they conformed to norms laid down in the manual and that there was no duplication. Thereafter, the plans were sent to the District Health Committee (DHC) for approval. The DHC consisted of district panchayat president (Sabhadhipati), District Magistrate, Chief Medical Officer, and district engineers. Once the plans were approved, project funds were released to districts to implement the plans.

Fund flow mechanism

To ensure timely release of funds for the QI interventions, a new fund flow mechanism was developed in which funds were released from the project director's bank account to the PDT bank account, from the PDT account to the district bank account, and from districts to the implementing units. This mechanism was entirely outside the state's finance department.

QI manual at the grass roots level

A manual on quality standards was prepared for use by ANMs. The manual consisted of simple quality guidelines for the different services provided by ANMs. It was also disseminated in the community as IEC materials, to enable the community to expect and demand quality services.

Community volunteers as links

In the project, community volunteers were engaged in each Gram Panchayat to provide linkages between community members and health workers. These volunteers were expected to conduct four community meetings in different villages per month and attend the QI sessions. They received Rs.100 for conducting four meetings and Rs.10 to cover travel expenses for attending each meeting.

Outcome of the Intervention

This intervention was reviewed in March 1998 using indicators in Box 2, by which time the process had been underway for nine months and 23 out of 30 blocks had completed the plans of the first cycle.

Box 2: Outcome indicators of QI

- Number of blocks developing plans
- Time taken to complete a planning cycle from proposal to approval
- Number of monthly QI sessions held and extent of participation
- Extent to which the analytical tools were used
- Quality of analysis and of proposals
- Number of interventions that did not require financial inputs
- Speed of implementation

Stumbling blocks to quick implementation: Government approvals

This review showed that though all blocks came up with plans fairly quickly, their approval and release of funds took considerable time. The Government of India's (GOI) approval to the project was delayed. Panchayat elections in the state and unprecedented floods in three districts caused further delays. These delays caused a certain amount of disillusionment among the staff about continuing with the QI process. The implementation progressed well only after the authorities decided to give more powers to the block level and speed-up the fund releases.

For example, block level committees were empowered to approve interventions falling entirely within their jurisdictions. Entire plan funds were released to the district to improve fund availability. A rolling fund of Rs.2000 was sanctioned to the Block Medical Officers for emergency expenses. PDT Members were allowed to plan and initiate innovations with the approval of block level committees.

Decentralisation at Subcentre level: difficult

During the implementation, block level QI sessions were not held regularly and participation in them by health workers, administrators and community members was not up to the mark, yet it was better than what could be achieved at the sub-centre level. The GOI's recommendation to decentralise the planning process at sub-centre level proved difficult to implement.

Complicated analytical tools. too large a project area

In each QI session, the staff tried to use the analytical tools described in the manual but found them too complicated too follow. They needed expert guidance and as a result, trying to implement the program in 30 blocks became very difficult.

Too large as project area

A large project area resulted in the dilution of the efforts of PDT members. As a result, some blocks did extremely well while others made no progress towards QI. The intervention perhaps had a better

chance of success if attention was focused on a smaller number of active blocks than on all blocks.

The involvement of panchayats and the community was achieved to a large extent. The QI process was found to be useful in improving capacity for local decision making and providing opportunities for local innovations and experimentation.

QI framework for community participation and bottom up planning

The QI process improved the district administration's capacity to undertake local resource planning. For example, the district administrator decided to pool the resources available to the district through different health programmes to avoid duplication and provide better health services. The involvement of the District Magistrate and District Panchayat President (Sabhadhipatis) made it possible to mobilise local resources. The QI process provided a framework to facilitate community participation and bottom-up planning. However, community involvement was more useful for creating health awareness and for understanding users' perspective on service quality rather than in the technical matters of the QI process.

Simple financing system

The project succeeded in developing a new and simple financing mechanism that was able to respond quickly to local needs and had built-in flexibility.

Lessons Learnt

QI process generated through external impetus

Though the QI process was resource intensive in terms of both time and effort, its valuable gain was in increasing the community's awareness about the quality improvement process. The involvement of panchayats in this process created the possibility of the community eventually taking over the responsibility of managing health services. But their participation in the QI process along with the health staff, was generated through external impetus. Whether self-motivated quality circles would emerge and work without external impetus like the project, remained an unanswered question.

QI programme works well at block level

The QI Programme operated well at the block level but not at lower levels. Also it mainly involved health providers while the community's involvement was marginal. The QI process worked well only where health staff and community leaders were enthusiastic about it. This implied that for QI process to work it was important to create a positive environment , through rewards and incentives.

QI process built capacity at district & block level

The QI Process did succeed to some extent in developing capacity for planning and management at district and block levels. Availability of unallocated funds at the district and block levels enabled them to identify local problems and implement solutions. However, fund management and accounting at the block level needed strengthening.

This project, for the first time in the state, enabled the public health system to work with persons drawn from the non-governmental sector. The PDT, whose members were recruited from outside the government system, was a valuable resource and its association with the programme made a positive impact.

The project also attempted to change the way the government system worked. The new management and financing system, despite its risks such as lack of adequate skills and stringent procedures, was likely to facilitate effective decentralisation of health services.

QI programme paid too much attention to insitutionalising community participation, to planning than to implementation

The QI Programme however suffered because it paid too much attention to institutionalising community participation and to planning, than to implementation. This resulted in long delays in approval and implementation of the QI plans. Interventions that did not require financial support were not favoured in the QI plans.

Most plans required procurement of furniture and equipment. This was to be expected in a resource-crunch state where the condition of health centres was very unsatisfactory.

Need for QI to be a continuous process

However, once physical facilities improve, aspects such as quality and access were expected to receive more attention in the QI process. The second set of plans indeed had paid more attention to quality aspects such as improving immunisation coverage and quality of antenatal care. Other areas such as improving water supply, electricity, equipping OT and delivery room, waste disposal were also expected to find place in the QI plans provided QI was not a one-time intervention but a continuous process.

Need to develop uniform physical and financial norms

But relying on block level staff to work out both financial and physical requirements was also problematic. Different blocks used different cost estimates and came up with very different budgets. That suggested the need to develop uniform physical and financial norms within which the QI process would operate. Thus the QI process needed to achieve a fine balance between local needs and state level norms.

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